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of Transportation

**National Highway
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400 Seventh Street, S.W.
Washington, D.C. 20590

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DYNAMIC SCIENCE, INC.

In-Depth Accident Investigation

Contract Number DTNH22-94-D-27058

Case Number DSI-95-AB-01

, 1996

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		14. Sponsoring Agency Code	
15. Supplemental Notes Alleged non-deployment of airbag in 1993 Ford Taurus GL.			
16. Abstract This case was initiated in response to a reported non-deployment of the case vehicle's air bags. This collision occurred in 1995 at 0319 hours in the area. This on-site investigation focused on a 1993 Ford Taurus (GL), four door sedan, driven by a 21 year old male who was driving under the influence of alcohol and lost control of the vehicle. Vehicle 1 drove off the right side of the roadway and struck a concrete post, knocking it over, then drove over and snapped the post's steel support cable. Vehicle 1 was airborne and rotated clockwise in midair two quarters of a turn and slammed into the hillside on its roof. Vehicle 1 continued down the hill and rolled counterclockwise onto its four tire. It continued down the hill running over several trees and shrubs. When it reached the bottom of the hill it struck a rock with its rear, and Vehicle 1 came to final rest on the front yard of a private residence on all four tires. The driver was not wearing the available lap/shoulder restraints and sustained injuries consisting of thoracic and lumbar strain/compression, and an abrasion to the right side of his forehead. He was taken to a local hospital via ambulance, and was hospitalized for three days. The right front occupant of Vehicle 1, who was wearing the available lap/shoulder restraints, only received a contusion to his right knee. He did not seek any medical treatment.			
17. Key Words Air bag, non-deployment		18. Distribution Statement General Public	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No of pages 17	22. Estimated Total Price \$3,751.84

TECHNICAL SUMMARY

CONTRACTOR: Dynamic Science, Inc.
CONTRACT NUMBER: DTNH22-94-D-27058
CASE NUMBER: Case DSI-95-AB-05

This case was initiated in response to a reported non-deployment of the case vehicle's air bags.

This collision occurred in , 1995 at 0319 hours in the area. This on-site investigation focused on a 1993 Ford Taurus (GL), four door sedan that was involved in a collision with an object, rollover single vehicle type collision. The case vehicle was inspected eighteen days after the collision. The vehicle had been stored in the outside yard of the body shop where it was inspected.

The crash occurred on a two lane, two way, divided, asphalt surface roadway that was wet with a posted speed limit of 40 km/h (25 mph). The roadway is a winding uphill roadway in a residential area with dirt shoulders. The east shoulder, on Vehicle 1's side has a 52% grade drop beyond the boundaries of the shoulder.

Vehicle 1, a 1993 Ford Taurus (GL) was traveling northbound at a minimum speed of 26 km/h (16 MPH). Vehicle 1 was equipped with a Supplemental Restraint System (SRS) that consisted of factory installed dual driver's and right front passenger's air bags, and manual lap/shoulder restraints.

It was raining and Vehicle 1 was traveling in a northerly direction on the winding two lane roadway. The driver of Vehicle 1 was driving under the influence of alcohol, and lost control of the vehicle. He braked the vehicle as he approached a curve, and laid down 9.1 m (29.9 ft) of skids. Vehicle 1 drove off the roadway on the right side and the front struck a 1.2 m by 20.3 cm (4 ft by 8 in) concrete post, and at the same time Vehicle 1 had run up a steel support cable with its undercarriage. The ground was very wet, and Vehicle 1 ran over the concrete post knocking it over, and at the same time the steel support cable "snapped". Vehicle 1 was airborne and rotating clockwise about its longitudinal axis, and it began heading down the 52% grade while airborne. Vehicle 1 rotated clockwise in midair two quarters of a turn and slammed into the hillside on its roof. The impact caused the windshield to crack and hole, and both left side windows disintegrated. Vehicle 1 continued in a northeasterly direction down the hill and rolled counterclockwise onto its four tires. It continued down the hill running over several trees and shrubs. When it reached the bottom of the hill it crossed over a private single lane asphalt roadway, and rotated counterclockwise approximately 90 degrees. Vehicle 1's back end struck a rock, and Vehicle 1 came to final rest heading in a northerly direction on the front yard of a private residence on all four tires.

Vehicle 1 sustained major damage to its front, roof, and moderate damage to its back, and left side planes. The PDOF for the first impact with the concrete post is estimated to have been -5 degrees with a CDC of 12FCEN1. The rollover was the highest Delta-V, and a CDC of 00TYDO4 was assigned to it. An attempt was made to calculate Delta-Vs with WinSmash 1.2.1 using the barrier/pole options for the first impact with the concrete post and the measured the stroking of the front bumper energy absorbing device. WinSmash computed a total Delta V of 9.3 km/h (5.8 mph), a longitudinal Delta V of -9.3 km/h (-5.8 mph). This is a borderline reconstruction given that the post was a yielding object. The ground at the location was extremely wet, and when the investigator pushed on the concrete post it gave way very easily. The air bags did not deploy as a result of the frontal collision since the deployment threshold was not exceeded. The rollover event is beyond the performance envelope of the air bag system.

Vehicle 1 was towed from the scene of the accident due its damage, and was declared a total loss by the insurance company.

There were two occupants in Vehicle 1. The driver was a twenty one year old male positioned in the split bench seat in the middle track location. He weighed 58.9 kg (130 lb) and was 163 cm (64.2 in) in height. He reported to the police and the investigator that he was wearing the available lap/shoulder restraints, however, he stated to the doctors that he was not wearing seat belts. His injuries indicate that he probably was not wearing the lap/shoulder restraints. He sustained injuries consisting of thoracic and lumbar strain/compression due to his head probably striking the roof. He also sustained an abrasion to the right side of his forehead. He was taken to a local hospital via ambulance, and was first seen at the emergency room at around 0430 hours. He was hospitalized for three days, and lost 1 ½ days of work. He received further treatment of his back injuries from a chiropractor.

The right front occupant of Vehicle 1 was a twenty year old male, positioned in the split bench seat in the middle to rear most track location. He was wearing the available lap/shoulder restraints. According to the driver of Vehicle 1, the right front occupant sustained an injury consisting of a contusion to his right knee that was caused by contact to the instrument panel. He did not claim any injuries to the police, and he did not seek any medical treatment.

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

DYNAMIC SCIENCE, INC.
ACCIDENT INVESTIGATION
CASE NUMBER: DSI-95-AB-05

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ACCIDENT DATA:

Location:	
Area/Type:	Residential, Suburban / Forest
Date/Time:	1995 / 0319 Hours
Number of Days after Collision Vehicle inspected/Where Inspected?:	Eighteen days after collision/Body shop, vehicle stored in outside lot.
Accident Type:	Car / Fixed object / Rollover

INJURY SEVERITY:

Vehicle 1:	Driver, AIS = 1
	R/F Occupant, AIS = 1

AMBIENCE:

Viewing Conditions:	Early morning, raining and winding roadway
Cloud Cover:	Cloudy, overcast
Precipitation:	Wet
Temperature:	Unknown
Road Surface:	Wet

ROADWAY:

VEHICLE 1

Type:	2-lane, two way, traffic way that was divided by yellow bots dots
Width:	Approximately 7.0 m (23 ft)
Traffic Density:	Very light
Median:	None
Edge:	East shoulder edge uneven gravel, grass
Surface:	Asphalt, wet, good condition
Reported Defects:	None
Co-efficient of Friction (est.):	Minimum .40 Maximum .85
Vertical Alignment:	Slightly uphill, < 2%
Horizontal Alignment:	Winding roadway

TRAFFIC CONTROLS:

VEHICLE 1

Signals:	None
Signs:	None
Speed Limit:	40 km/h (25 MPH)
Markings:	Yellow bots dots separate north and southbound opposing traffic lanes. White bots dots denote beginning of soft shoulders.

VEHICLES:

VEHICLE 1

Description:	1993 Ford Taurus (GL) 4-door
Odometer:	53,928 km (33,510 mi)
Engine:	V6 / 3.8 L
Vehicle Modifications:	None
Tire Condition:	Good tread, no unusual tread pattern
Manual Restraints:	3-point lap/shoulder restraints at L/F, R/F, L/R, and R/R seating positions . 2-point lap restraint at C/F seat, and C/R seat.
Automatic Restraints:	Supplemental Restraint System, driver's and right front passenger's side factory installed air bags
Reported Defects:	None
Cargo:	None
Windshield Damage:	Cracked and holed from contact with the ground from rollover
Fleet:	None
Tow Status:	Towed due to damage

VEHICLE DAMAGE:

VEHICLE 1						
Object Struck:	Concrete post	Steel cable	Rollover, struck ground	Tree	Shrubbery	Rock
Event Number:	01	02	03	04	05	06
CDC:	12FCEN1	12UDRN1	00TYDO4	12FDEW1	12FDEW1	06BCEN1
Maximum Crush:	C ₁ = 5.3 cm (2.1 in.) C ₂ = 6.4 cm (2.5 in.); measured stroking of front bumper E.A.D.	not measured	Zone 2, 34.3 cm (13.5 in) vertical crush near the A pillar on the left side of vehicle	overlapping damage	overlapping damage	overlapping damage

VEHICLE VELOCITY ESTIMATES:

VEHICLE 1						
Impact Speed (estimated):	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Total Delta V¹:	9.3 km/h (5.8 mph)	Unknown	Unknown	Unknown	Unknown	Unknown
Longitudinal Delta V:	-9.3 km/h (-5.8 mph)	Unknown	Unknown	Unknown	Unknown	Unknown
Lateral Delta V:	0.8 km/h (0.5 mph)	Unknown	Unknown	Unknown	Unknown	Unknown
Energy Dissipation:	5,281 Joules 3,897 ft-lbs	Unknown	Unknown	Unknown	Unknown	Unknown

¹ Borderline reconstruction using barrier/pole options of WinSmash 1.2.1

COLLISION SEQUENCE:

Pre-Crash: This single vehicle collision occurred during the early morning hours in a suburban forest area of . It was raining and the roadway was wet and free of defects. This is a winding roadway that has a slight uphill slope, and it was dark with no lighting. The traffic density was very light and the posted speed limit was 40 KPH (25 MPH). There are no traffic controls.

The traffic way measures approximately 7.0 m (23.0 ft) in width and consists of one northbound travel lane and one southbound travel lane. North and south traffic is separated by yellow painted bots dots. The soft shoulders edges are marked by white painted bots dots.

Vehicle 1 (the case vehicle) was a 1993 Ford Taurus (GL), driven by a 21 year old male. Vehicle 1 was traveling northbound. The driver was not wearing the available lap/shoulder restraints. The right front occupant, a 20 year old male, was wearing the available lap/shoulder restraints. The driver of Vehicle 1 was driving under the influence of alcohol. This and the poor weather conditions, caused him to lose control of his vehicle. He braked as he approached the curve, laid down 9.1 m (29.9 ft) of skids, and drove off the roadway and onto the right shoulder area.

Crash: Vehicle 1 drove off the right side of the roadway. The front of the vehicle struck a 1.2 m by 20.3 cm (4 ft by 8 in) concrete post and, at the same time, ran up a steel support cable with its undercarriage. The ground was very wet, the vehicle ran over the concrete post knocking it over, and the steel support cable "snapped". Vehicle 1 was airborne and rotating clockwise about its longitudinal axis, and it began heading down the 52% grade while airborne. Airborne Vehicle 1 rotated clockwise two quarters of a turn and slammed into the ground on its roof. The impact caused the windshield to crack and hole, and both left side windows disintegrated. The PDOF for the first impact with the concrete post is estimated to have been -5 degrees with a CDC of 12FCEN1. The rollover was the highest Delta-V, and a CDC of 00TYDO4 was assigned.

Post Crash: Vehicle 1 continued in a northeasterly direction down the hill and rolled counterclockwise onto its tires. It continued down the hill running over several trees and shrubs. When it reached the bottom of the hill it crossed over a private single lane asphalt roadway, and rotated counterclockwise approximately 90 degrees. Vehicle 1's back end struck a rock, and Vehicle 1 came to final rest heading in a northerly direction on the front yard of a private residence on all four tires.

Occupant

Kinematics: There were a total of two occupants in Vehicle 1. The driver was a twenty one year old male positioned in the split bench seat in the middle track location. He weighed 58.9 kg (130 lb) and was 163 cm (64.2 in) in height. He reported to the police and the investigator that he was wearing the available lap/shoulder restraints, however, he stated to the doctors that he was not wearing seat belts. His injuries indicate that he probably was not wearing the lap/shoulder restraints. After impact with the concrete post and the collapse of the steel support cable (causing Vehicle 1 to rollover and rotate clockwise while airborne), the unrestrained driver was probably thrust towards the roof top. When the roof of Vehicle 1 slammed onto the ground, the driver struck the roof top with his head, and sustained injuries consisting of thoracic and lumbar strain/compression. He also sustained an abrasion to the right side of his forehead. As Vehicle 1 then rolled over counterclockwise and continued down the hill to final rest, the unrestrained driver continued to be thrust about the vehicle.

The right front occupant of Vehicle 1, a twenty year old male, positioned in the split bench seat in the middle to rear most track location was wearing the available lap/shoulder restraints. When Vehicle 1 rolled over and struck the ground, the restrained right front occupant moved forward slightly and his right knee struck the instrument panel, and sustained an injury consisting of a contusion to his right knee. As Vehicle 1 then rolled over counterclockwise and continued down the hill to final rest, the restrained right front occupant remained inside the vehicle.

Supplemental Restraint

System:

This 1993 Ford Taurus (GL) was equipped with factory installed driver's and right passenger's air bags that did not deploy as a result of the collisions. Calculated longitudinal Delta V of -9.3 km/h (-5.8 mph) are below the air bag deployment threshold. No failures were noted as the other collision conditions (undercarriage striking cable, rollover, etc.) are beyond the performance envelope of the air bag system.

Scene

Clearance:

Time of the collision was 0319 hours. The police were dispatched to the scene at 0334 hours and arrived at 0345 hours. The driver was transported via ambulance to the hospital at an unknown hour, but the emergency room records indicate that he was first seen at 0430 hours. The driver was then admitted to the hospital at 0712 hours where he remained until discharged on . , 1995.

Vehicle 1 sustained severe damage, and was declared a total loss by the insurance company. Vehicle 1 was towed from the scene due to the damage sustained.

Safety Standards:

There were no violations of Federal Motor Vehicle Safety Standards noted during the on-site inspection of Vehicle 1.

DRIVER AND OTHER OCCUPANTS:**VEHICLE 1**

	DRIVER	OCCUPANT 2
Age/Sex:	21 year old/male	20 year old/male
Seated Position:	Left front	Right front
Seat Type:	Split Bench with separate back cushions	Split Bench with separate back cushions
Height:	162.6 cm (64.0 in)	167.6 cm (66.0 in)
Weight:	59 kg (130 lbs.)	73 kg (160 lbs.)
Occupation:	Service	Unknown
Pre-existing Medical Condition:	Unknown	Unknown
Alcohol/Drug Involvement:	Yes/None	Unknown
Driving Experience:	Unknown	N/A
Body Posture:	Normal upright	Upright per the driver
Hand Position:	10 & 2 O'clock positions	Unknown
Foot Position:	On floorboard with the right foot on the brake pedal	Unknown
Restraint Usage:	None	Lap/Shoulder
Additional Occupants:	None	

INJURIES:**Vehicle 1**

	INJURY	AIS/OIC CODE	ICD-9	SOURCE	<u>Confidence Level</u>
Driver:	Thoracic strain/compression	640478.1,7	847.1	Roof	Probable
	Lumbar strain/compression	640678.1,8	847.2	Roof	Probable
	Abrasion to right side of forehead	290202.1,7	910.0	Unknown	Unknown
R/F Occupant:	Contusion to right knee	890402.1,1	924.1	Right instrument panel	Possible

Abbreviations Used In Narrative, Scene And Photographic Documentation

ft.	Feet
in.	Inches
AIS	Abbreviated Injury Scale
BLF	Begin Left Front
BLR	Begin Left Rear
BRF	Begin Right Front
BRR	Begin Right Rear
CBE	Cab Behind Engine
CCW	Counterclockwise
CDC	Collision Deformation Classification
CG	Center of Gravity
CM	Centimeter
COE	Cab Over Engine
CW	Clockwise
E, EB	East, Eastbound
ELF	End Left Front
ELR	End Left Rear
ERF	End Right Front
ERR	End Right Rear
FRP	Final Rest Position
I	Interstate Highway
IP	Intermediate Point
KG	Kilogram
KPH	Kilometers Per Hour
LF	Left Front
LR	Left Rear
M	Meter
N, NB	North, Northbound
NE	Northeast
NW	Northwest
PDOF	Principal Direction of Force
POI	Point of Impact
R	Radius of Curvature
RF	Right Front
RL	Reference Line
RP	Reference Point
RR	Right Rear
S, SB	South, Southbound
SE	Southeast
SW	Southwest
T	Time or Elapsed Time (in seconds)
U.S.	United States Highway
V1	Vehicle Number 1
W, WB	West, Westbound

Scene Diagram

DSI-95-AB-05

Case Vehicle: 1993 Ford Taurus (GL)

Non-Deployment of Air Bags

Single vehicle collision

NOT TO SCALE

Bituminous, wet surface

Suburban area

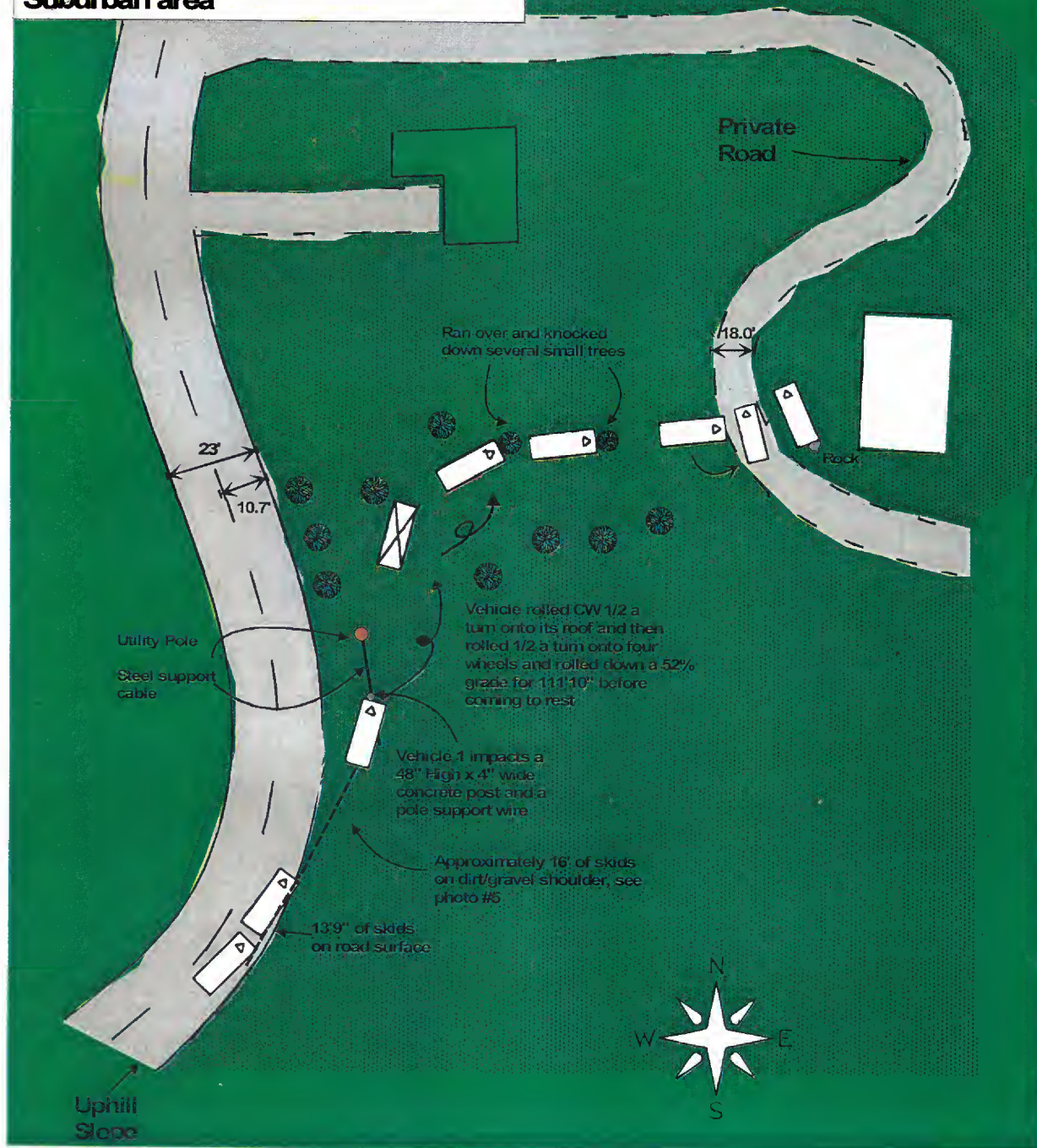


PHOTO INDEX

Case Number DSI-AB-95-05

PHOTO NO.	VEHICLE NO.	ORIENTATION	SUBJECT MATTER
001-005	01	North	Vehicle 1, direction of travel towards impact with concrete post, and steel support cable. **Photograph # 005 red arrows indicate skid marks made by Vehicle 1 on the shoulder.
006-013	01	North	Vehicle 1, concrete post, and steel support cable.
014-016	01	North-East	Vehicle 1, area where rolledover, and slammed onto the ground on its roof.
018	01	East	Vehicle 1, direction of travel towards final rest area.
018	01	East	Vehicle 1, final rest area.
019	01	North	Vehicle 1, direction heading at final rest.
020-022	01	South	Vehicle 1, opposite direction traveled as it rolled down the hill.
023	01	South	Vehicle 1, opposite direction traveled on roadway.
024-064	01		Vehicle 1, exterior damage. **Photo #064 indicates air bag sensor under the front cowling.
065-070	01		Vehicle 1, crush measuring stands set at front bumper mounting brackets. Damage was non-horizontal and thus =0.
071-094	01		Vehicle 1, interior.

Interview Form

Case Number: DSI-95-AB-05
Vehicle Number: 01
Interviewee: Driver
Accident Date/Time: 1995 / 0319 Hours

Description of Accident

It was raining hard and the ground was very wet. I was northbound on XXXXXX at well below the posted speed limit. I really am very fuzzy as to what happened before or after the accident. I think that the right front tire hooked the gravel and I ran off the road, and rolled over. What happened after this is very fuzzy. I do remember that the car was upright on all four wheels when we came to a stop at the bottom of the hill.

Seat Position	Left Front	Right Front	
Age/Sex	21/Male	20/Male	
Height/Weight	64"/130 Lbs..	66"/160 Lbs..	
Posture	Normal	Normal	
Ejection	No	No	
Entrapment	No	No	
Restraint Type	Lap/Shoulder	Lap/Shoulder	
Usage/Failures	Used??/No failures	Used/No failures	
Treatment	Hospitalized	None	
Time in hospital	2 days	None	
Lost working days	1 ½	None	
Glasses or Contact Lenses? [Y/N] Describe:	NA	NA	
Related Glasses/Contact Lenses Injuries:	NA	NA	

Cargo: None

General Information

DS9505

	<u>Vehicle 1</u>	<u>Vehicle 2</u>
Year:	1993	0
Make:	Ford	
Model:	Taurus	
Body Style:	4S	
CDC:	12FCEN1	BARRIER
Damaged Side:	Front	
PDOF:	355°	0°
Heading Angle:	21°	0°

Vehicle Information

	<u>Vehicle 1</u>	<u>Vehicle 2</u>
Wheelbase:	269.0 cm	0.0 cm
Length:	488.0 cm	0.0 cm
Width:	181.0 cm	0.0 cm
Weight:	1548.0 kg	454545.0 kg
Center of Gravity:	228.1 cm	127.0 cm
Radius of Gyration:	146.4 cm	0.0 cm
D0:	0.0 sqrt(N)	0.0 sqrt(N)
D1:	14.5 sqrt(N)/cm	0.0 sqrt(N)/cm
Size Category:	3	11
Stiffness Category:	3	0

Vehicle 1: Used d0 and d1 values estimated from the vehicle size (modified for pole impact).
 Vehicle 2: Used d0 and d1 values estimated from the vehicle size.

DS9505

WinSMASH 1.2.1

Damage Information

	<u>Vehicle 1</u>	<u>Vehicle 2</u>
	Pole Impact	
Damage Length:	146.1 cm	0.0 cm
Damage Offset:	0.0 cm	0.0 cm
Field L - D:	0.0 cm	0.0 cm
C1:	5.3 cm	
C2:	6.4 cm	
C3:		
C4:		
C5:		
C6:		

Summary of Results Using Damage

Vehicle 1

	Speed Change (Damage)
Total:	9.3 km/h
Longitudinal:	-9.3 km/h
Latitudinal:	0.8 km/h
PDOF:	355°

Energy Dissipated:	5,281 Joules
Barrier Equivalent Speed:	9.3 km/h
Moment Arm of Principle Force:	19.6 cm (CW)
Change in Angular Velocity:	0.1 deg/seconds

Used d0 and d1 values estimated from the vehicle size (modified for pole impact).

Vehicle 2

Barrier

Summary of Results Using Damage

Vehicle 1

	Speed Change (Damage)
Total:	5.8 mph
Longitudinal:	-5.8 mph
Latitudinal:	0.5 mph
PDOF:	355°
Energy Dissipated:	3,897 ft-lbs
Barrier Equivalent Speed:	5.8 mph
Moment Arm of Principle Force:	7.7 in (CW)
Change in Angular Velocity:	0.1 deg/seconds

Used d0 and d1 values estimated from the vehicle size (modified for pole impact).

Vehicle 2

Barrier

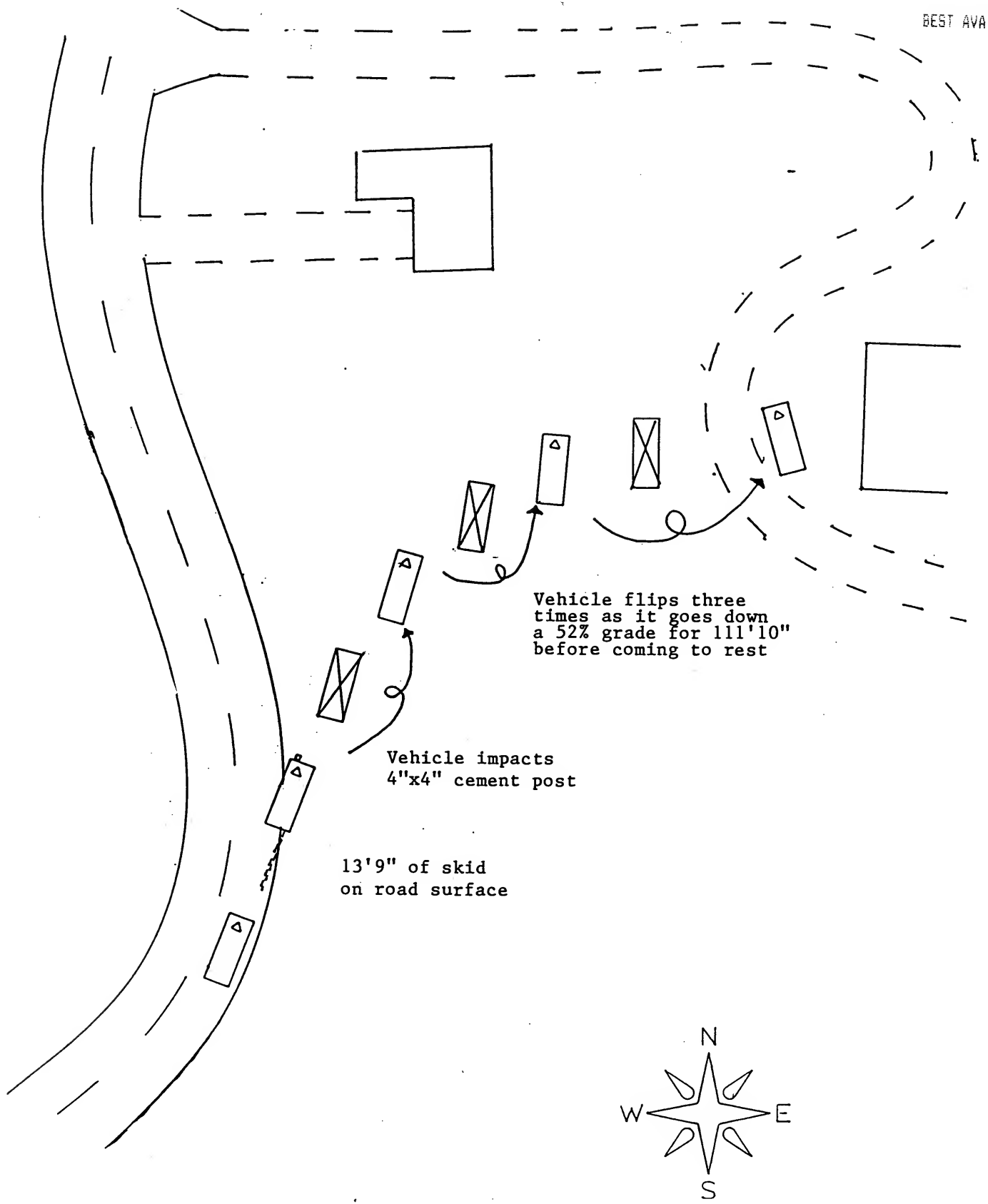
PAGE OF

☒ TRAFFICWAY☐ PRIVATE WAY

N

2	DATE OF COLLISION 95		DAY OF COLLISION X		TIME (USE 2400 HOUR) 0319		POLICE COMP NUMBER		23
2	MILES ON		INTERSECTING WITH STREET OR ROAD		ROUTE CODE		EQ MILEPOST		22
3	DISTANCE & DIRECTION FROM REFERENCE, CROSS STREET OR HIGHWAY		STREET &		ACCIDENT MILEAGE CODE		DIAGRAM DATA		23
4	COLLISION INVOLVED: TOTAL NO. OF VEHICLES 1		SEVERITY: NO. KILLED 0 NO. INJURED 1 PROPERTY DAMAGE ONLY		FUEL SPILLAGE HIT & RUN STOLEN VEHICLE		X-RD INTERSECTING OR REFERENCE ST/RD		23
9	OBJECT STRUCK (NAME OF OBJECT STRUCK AND OWNER'S NAME) STEEL SUPPLY CABLE TREES & SHRUBS PUGET POWER BOB WEBER		EST. DAMAGE \$ 1250.00		SPECIAL CODING				24
2	DRIVER'S NAME: LAST FIRST MIDDLE		CITY STATE ZIP CODE		PHONE NO.				25
7	DRIVER'S LICENSE NO.		STATE SEX		DATE OF BIRTH MO. DAY YR.				26
2	OCCUPATION		FIRM NAME & PHONE NO.		EYES WEIGHT HEIGHT				27
2	CHECK (✓) IF OPERATOR WAS DRIVING A COMMERCIAL VEHICLE		CHECK (✓) IF OPERATOR WAS DRIVING A COMMERCIAL VEHICLE						28
2	NATURE OF INJURIES BACK		NATURE OF INJURIES						29
5	VEH. YEAR 93 MAKE (DODGE-CHEV.) FORD MODEL (DART-NOVA) TAURUS STYLE (2 DR.-CONV.) 4D		VEH. COLOR SILVER		LICENSE PLATE NO. WA		STATE		30
3	REGISTERED OWNER		LAST FIRST MIDDLE		PHONE NO.				31
2	ADDRESS OF OWNER								32
14	WAS LIABILITY INSURANCE IN EFFECT? YES NO		NAME OF INSURANCE COMPANY		WAS LIABILITY INSURANCE IN EFFECT? YES NO				33
15	SHADE IN DAMAGED AREA		VEH. DAMAGE DISABLING FUNCTIONAL OTHER DMG		EST. DAMAGE		SHADE IN DAMAGED AREA		34
16	DIAGRAM OF COLLISION: (USE SUPPLEMENTAL SHEET IF NECESSARY)		INDICATE NORTH BY ARROW		DESCRIPTION OF COLLISION: (USE SUPPLEMENTAL SHEET IF NECESSARY)				35
17	SEE ACCIDENT CASE REPORT				VEHICLE 1 WAS TRAVELING N/3 IN THE BLK OF WHEN IT LEFT THE ROADWAY AND DOWN AN EMBANKMENT ROLLING OVER 3 TIMES BEFORE COMING TO REST AT DRIVER TRANSPORTED TO VIA BACK INJURY WITH POSSIBLE				36
18									37
19	NAME, ADDRESS & INJURIES OF PERSONS INVOLVED		OCCUPANTS/WITNESSES (USE SUPPLEMENTAL SHEET FOR ADDITIONAL NAMES)						38
20	NAME		ADDRESS						39
20	ADDRESS								40
	DGE OR		UNIT OR DIST. & DET.		POLICE DISPATCHED		DATE OF REPORT		41
			PATROL				95		42

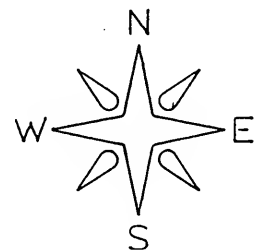
(1) STATUS	(2) SEAT POSITION	(3) INJURY CLASS	(4) RESTRAINT SYSTEMS	(5) EJECTION	(6) MOTORCYCLE SAFETY
2. PASSENGER		1. NO INJURY 2. INJURY AT SCENE 3. DEAD ON ARRIVAL 4. FATAL ON ARRIVAL 5. CRITICAL INJURY 6. NON-FATAL INJURY 7. POSSIBLE INJURY	1. NOT ACTIVATED AND TAG, BELT IS USED 2. TAG BELT USED 3. CHAIRMAN BELT USED 4. TAG & CHAIRMAN BELT USED 5. TAG NOT SEPARATE USED 6. NOT ACTIVATED AND TAG, BELT IS USED	1. NOT EJECTED 2. TOTALLY EJECTED 3. PARTIALLY EJECTED 4. UNKNOWN IF EJECTED	0. NONE SEATED 1. SEATMAN USED 2. SEATMAN NOT USED
3. PILOT/COPILOT	7. OTHER POSITION 8. POSITION UNKNOWN 9. MOTORCYCLE 0. OUTSIDE OF VEHICLE				
4. PILOT/COPILOT					
5. OTHER					
6. UNKNOWN					



Vehicle flips three times as it goes down a 52% grade for 111'10" before coming to rest

Vehicle impacts 4"x4" cement post

13'9" of skid on road surface



NOT TO SCALE

95
INVESTIGATING OFC.
DRAWN BY:

























95-AB-05-023



95-AB-05-024











95-AB-05-035



95-AB-05-036

















95-AB-05-049



95-AB-05-050







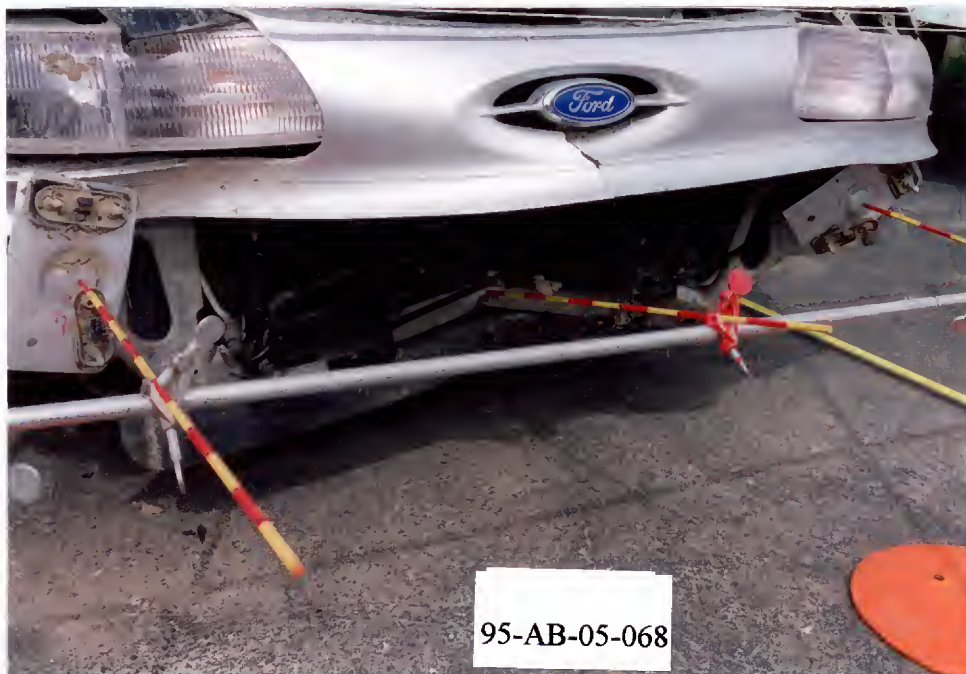


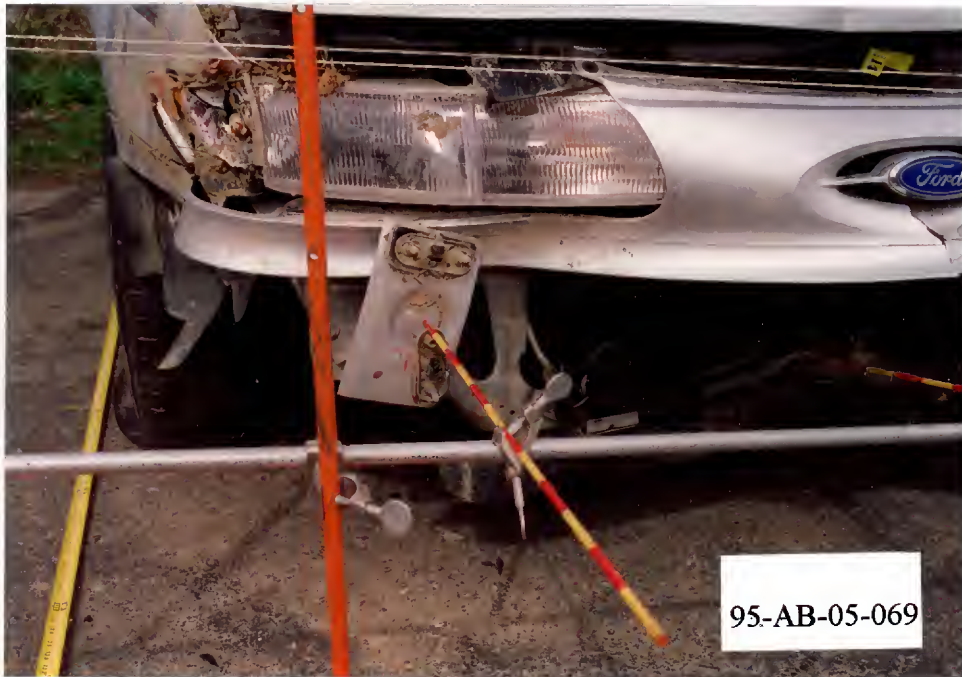


















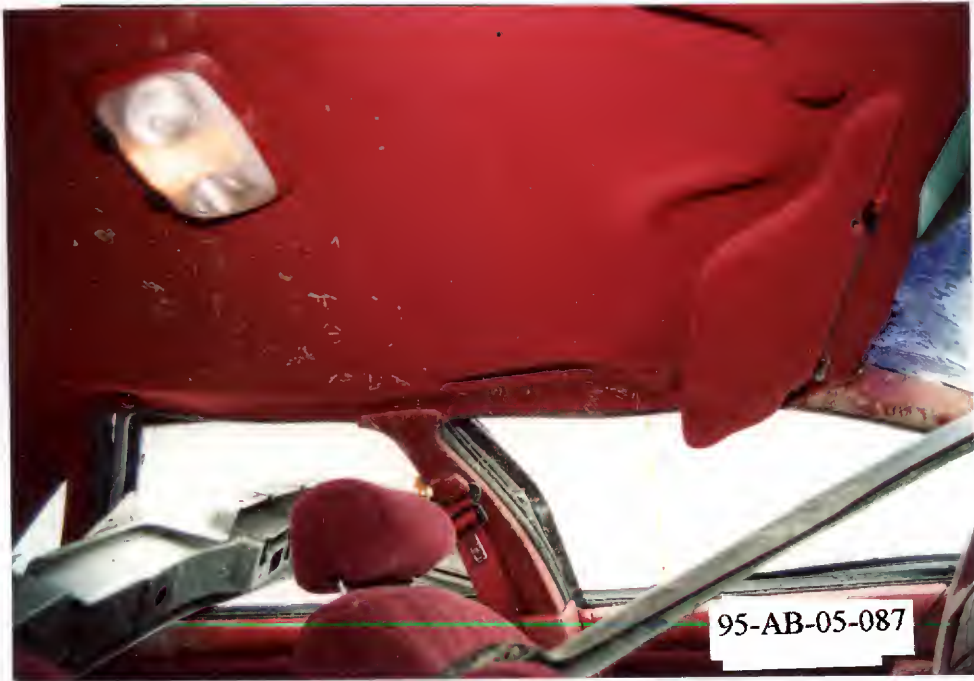


















National Highway Traffic Safety
Administration

ACCIDENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number _____

2. Case Number - Stratum DSI-95-AB-05

IDENTIFICATION

3. Number of General Vehicle
Forms Submitted 014. Date of Accident
(Month,Day,Year) 1 9 55. Time of Accident 0319

Code reported military time of accident.

NOTE: Midnight = 2400
Unknown = 9999

SPECIAL STUDIES INDICATORS

Check (✓) each special study (SS15-SS18 below) that
has been completed; code 1 for the checked special
studies and 0 for the special studies not checked.6. 0 SS15 Administrative Use 07. 0 SS16 Pedestrian Crash Data Study 0
(Data for this special study available
in a separate file.)8. 0 SS17 Impact Fires 09. 0 SS18 Unsafe Driver Actions 010. 0 SS19 _____

NUMBER OF EVENTS

11. Number of Recorded Events
in This Accident 06Code the number of events which occurred
in this accident.

ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved
vehicle or object in the right columns.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>0 1</u>	13. <u>01</u>	14. <u>03</u>	15. <u>F</u>	16. <u>54</u>	17. <u>00</u>	18. <u>0</u>
19. <u>0 2</u>	20. <u>01</u>	21. <u>03</u>	22. <u>U</u>	23. <u>68</u>	24. <u>00</u>	25. <u>0</u>
26. <u>0 3</u>	27. <u>01</u>	28. <u>03</u>	29. <u>T</u>	30. <u>31</u>	31. <u>00</u>	32. <u>N</u>
33. <u>0 4</u>	34. <u>01</u>	35. <u>03</u>	36. <u>F</u>	37. <u>42</u>	38. <u>00</u>	39. <u>0</u>
40. <u>0 5</u>	41. <u>01</u>	42. <u>03</u>	43. <u>F</u>	44. <u>43</u>	45. <u>00</u>	46. <u>0</u>

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

ACCIDENT EVENTS SUPPLEMENT

1. Primary Sampling Unit Number

2. Case Number—Stratum DSI-95-AB-PS

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
47. <u>0 6</u>	48. <u>φ 1</u>	49. <u>φ 3</u>	50. <u>B</u>	51. <u>6 8</u>	52. <u>φ φ</u>	53. <u>φ</u>
54. <u>0 7</u>	55. _____	56. _____	57. _____	58. _____	59. _____	60. _____
61. <u>0 8</u>	62. _____	63. _____	64. _____	65. _____	66. _____	67. _____
68. <u>0 9</u>	69. _____	70. _____	71. _____	72. _____	73. _____	74. _____
75. <u>1 0</u>	76. _____	77. _____	78. _____	79. _____	80. _____	81. _____
82. <u>1 1</u>	83. _____	84. _____	85. _____	86. _____	87. _____	88. _____
89. <u>1 2</u>	90. _____	91. _____	92. _____	93. _____	94. _____	95. _____
96. <u>1 3</u>	97. _____	98. _____	99. _____	100. _____	101. _____	102. _____
103. <u>1 4</u>	104. _____	105. _____	106. _____	107. _____	108. _____	109. _____
110. <u>1 5</u>	111. _____	112. _____	113. _____	114. _____	115. _____	116. _____
117. <u>1 6</u>	118. _____	119. _____	120. _____	121. _____	122. _____	123. _____
124. <u>1 7</u>	125. _____	126. _____	127. _____	128. _____	129. _____	130. _____
131. <u>1 8</u>	132. _____	133. _____	134. _____	135. _____	136. _____	137. _____
138. <u>1 9</u>	139. _____	140. _____	141. _____	142. _____	143. _____	144. _____
145. <u>2 0</u>	146. _____	147. _____	148. _____	149. _____	150. _____	151. _____

CODES FOR CLASS OF VEHICLE

- | | |
|---|--|
| (00) Not a motor vehicle | (31) Large pickup truck ($\leq 4,500$ kgs GVWR) |
| (01) Subcompact/mini (wheelbase < 254 cm) | (38) Other pickup truck ($\leq 4,500$ kgs GVWR) |
| (02) Compact (wheelbase ≥ 254 but < 265 cm) | (39) Unknown pickup truck type ($\leq 4,500$ kgs GVWR) |
| (03) Intermediate (wheelbase ≥ 265 but < 278 cm) | (45) Other light truck ($\leq 4,500$ kgs GVWR) |
| (04) Full size (wheelbase ≥ 278 but < 291 cm) | (48) Unknown light truck type ($\leq 4,500$ kgs GVWR) |
| (05) Largest (wheelbase ≥ 291 cm) | (49) Unknown light vehicle type |
| (09) Unknown passenger car size | (50) School bus (excludes van based) ($> 4,500$ kgs GVWR) |
| (14) Compact utility vehicle | (58) Other bus ($> 4,500$ kgs GVWR) |
| (15) Large utility vehicle ($\leq 4,500$ kgs GVWR) | (59) Unknown bus type |
| (16) Utility station wagon ($\leq 4,500$ kgs GVWR) | (60) Truck ($> 4,500$ kgs GVWR) |
| (19) Unknown utility type | (67) Tractor without trailer |
| (20) Minivan ($\leq 4,500$ kgs GVWR) | (68) Tractor-trailer(s) |
| (21) Large van ($\leq 4,500$ kgs GVWR) | (78) Unknown medium/heavy truck type |
| (24) Van Based school bus ($\leq 4,500$ kgs GVWR) | (79) Unknown light/medium/heavy truck type |
| (28) Other van type ($\leq 4,500$ kgs GVWR) | (80) Motored cycle |
| (29) Unknown van type ($\leq 4,500$ kgs GVWR) | (90) Other vehicle |
| (30) Compact pickup truck ($\leq 4,500$ kgs GVWR) | (99) Unknown |

CODES FOR GENERAL AREA OF DAMAGE (GAD)

- | | | | |
|---|-------------------------|---|----------------------------------|
| CDS APPLICABLE
AND OTHER
VEHICLES | (0) Not a motor vehicle | (R) Right side | (T) Top |
| | (N) Noncollision | (L) Left side | (U) Undercarriage |
| | (F) Front | (B) Back | (9) Unknown |
| TDC
APPLICABLE
VEHICLES | (0) Not a motor vehicle | (L) Left side | (C) Rear of cab |
| | (N) Noncollision | (B) Back of unit with cargo area
(rear of trailer or straight truck) | (V) Front of cargo area |
| | (F) Front | (D) Back (rear of tractor) | (T) Top |
| | (R) Right side | | (U) Undercarriage
(9) Unknown |

CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

- | | |
|---|---|
| (01-30) — Vehicle Number | (57) Fence |
| Noncollision | (58) Wall |
| (31) Overturn — rollover (excludes end-over-end) | (59) Building |
| (32) Rollover — end-over-end | (60) Ditch or culvert |
| (33) Fire or explosion | (61) Ground |
| (34) Jackknife | (62) Fire hydrant |
| (35) Other intraunit damage (specify): | (63) Curb |
| (36) Noncollision injury | (64) Bridge |
| (38) Other noncollision (specify): | (68) Other fixed object (specify): |
| (39) Noncollision — details unknown | (23) Steel support cable (51) Rock |
| Collision With Fixed Object | (69) Unknown fixed object |
| (41) Tree (≤ 10 cm in diameter) | Collision with Nonfixed Object |
| (42) Tree (> 10 cm in diameter) | (70) Passenger car, light truck, van, or other vehicle not in-transport |
| (43) Shrubbery or bush | (71) Medium/heavy truck or bus not in-transport |
| (44) Embankment | (72) Pedestrian |
| (45) Breakaway pole or post (any diameter) | (73) Cyclist or cycle |
| Nonbreakaway Pole or Post | (74) Other nonmotorist or conveyance |
| (50) Pole or post (≤ 10 cm in diameter) | (75) Vehicle occupant |
| (51) Pole or post (> 10 cm but ≤ 30 cm in diameter) | (76) Animal |
| (52) Pole or post (> 30 cm in diameter) | (77) Train |
| (53) Pole or post (diameter unknown) | (78) Trailer, disconnected in transport |
| (54) Concrete traffic barrier | (79) Object fell from vehicle in-transport |
| (55) Impact attenuator | (88) Other nonfixed object (specify): |
| (56) Other traffic barrier (includes guardrail)
(specify): | (89) Unknown nonfixed object |
| | (98) Other event (specify): |
| | (99) Unknown event or object |



GENERAL VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum DSI-95-AB-053. Vehicle Number 01

VEHICLE IDENTIFICATION

4. Vehicle Model Year 93Code the last two digits of the model year
(99) Unknown5. Vehicle Make (specify): 12FORDApplicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown6. Vehicle Model (specify): 017TAURUS (GL)Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown7. Body Type 04Note: Applicable codes may be found on
the back of this page.

8. Vehicle Identification Number

1 F A L P 5 2 4 3 P 6

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Left justify; Slash zeros and letter Z (0 and Z)

No VIN—Code all zeros

Unknown—Code all nines

9. Vehicle Special Use (This Trip) 0

(0) No special use

(1) Taxi

(2) Vehicle used as school bus

(3) Vehicle used as other bus

(4) Military

(5) Police

(6) Ambulance

(7) Fire truck or car

(8) Other (specify):

(9) Unknown

OFFICIAL RECORDS

10. Police Reported Vehicle Disposition 1

(0) Not towed due to vehicle damage

(1) Towed due to vehicle damage

(9) Unknown

11. Police Reported Travel Speed 999Code to the nearest kmph (NOTE: 000 means
less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

____ mph X 1.6093 = ____ kmph

12. Speed Limit 040

(000) No statutory limit

Code posted or statutory speed limit
in kmph

(999) Unknown

25 mph X 1.6093 = 040 kmph13. Police Reported Alcohol Presence For Driver 1

(0) No alcohol present

(1) Yes alcohol present

(7) Not reported

(8) No driver present

(9) Unknown

14. Alcohol Test Result For Driver 14Code actual value (decimal implied
before first digit—0.xx)

(95) Test refused

(96) None given

(97) AC test performed, results unknown

(98) No driver present

(99) Unknown

Source: Record15. Police Reported Other Drug Presence For Driver 0

(0) No other drug(s) present

(1) Yes other drug(s) present

(7) Not reported

(8) No driver present

(9) Unknown

16. Other Drug Specimen Test Result For Driver 0

(0) No specimen test given

(1) Drug(s) not found in specimen

(2) Drug(s) found in specimen, (specify):

(3) Specimen test given, results unknown or not
obtained

(8) No driver present

(9) Unknown if specimen test given

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories

Code actual 5-digit zip code

(99998) No driver present

(99999) Unknown

18. Driver's Race/Ethnic Origin 1

(1) White (non-Hispanic)

(2) Black (non-Hispanic)

(3) White (Hispanic)

(4) Black (Hispanic)

(5) American Indian, Eskimo or Aleut

(6) Asian or Pacific Islander

(7) Other (specify):

(8) No driver present

(9) Unknown

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): _____

- (09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 4,500$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ($\leq 4,500$ kgs GVWR)
- (23) Van based motorhome ($\leq 4,500$ kgs GVWR)
- (24) Van based school bus ($\leq 4,500$ kgs GVWR)
- (25) Van based other bus ($\leq 4,500$ kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): _____
- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): _____
- (59) Unknown bus type

Medium/Heavy Trucks ($> 4,500$ kgs GVWR)

- (60) Step van ($> 4,500$ kgs GVWR)
- (61) Single unit straight truck ($4,500$ kgs $<$ GVWR $\leq 8,850$ kgs)
- (62) Single unit straight truck ($8,850$ kgs $<$ GVWR $\leq 12,000$ kgs)
- (63) Single unit straight truck ($> 12,000$ kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): _____
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

PRECRASH ENVIRONMENTAL DATA**19. Relation To Interchange Or Junction** φ

- (0) Non-interchange area and non-junction
- (1) Interchange area related

Non-Interchange junctions

- (2) Intersection related
- (3) Driveway, alley access related
- (4) Other junction (specify) _____

- (5) Unknown type of junction

- (9) Unknown

20. Trafficway Flow φ

- (0) Not physically divided (two way traffic)
- (1) Divided trafficway-median strip without positive barrier
- (2) Divided trafficway-median strip with positive barrier
- (3) One way traffic
- (9) Unknown

21. Number Of Travel Lanes 2

- (1) One
- (2) Two
- (3) Three
- (4) Four
- (5) Five
- (6) Six
- (7) Seven or more
- (9) Unknown

22. Roadway Alignment 3

- (1) Straight
- (2) Curve right
- (3) Curve left
- (9) Unknown

23. Roadway Profile 1

- (1) Level
- (2) Uphill grade (>2%)
- (3) Hill crest
- (4) Downhill grade (>2%)
- (5) Sag
- (9) Unknown

24. Roadway Surface Type 2

- (1) Concrete
- (2) Bituminous (asphalt)
- (3) Brick or block
- (4) Slag, gravel, or stone
- (5) Dirt
- (8) Other (specify): _____
- (9) Unknown

25. Roadway Surface Condition 2

- (1) Dry
- (2) Wet
- (3) Snow or slush
- (4) Ice
- (5) Sand, dirt, or oil
- (8) Other (specify): _____
- (9) Unknown

26. Light Conditions 2

- (1) Daylight
- (2) Dark
- (3) Dark, but lighted
- (4) Dawn
- (5) Dusk
- (9) Unknown

27. Atmospheric Conditions 1

- (0) No adverse atmospheric-related driving conditions
- (1) Rain
- (2) Sleet/hail
- (3) Snow
- (4) Fog
- (5) Rain and fog
- (6) Sleet and fog
- (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): _____
- (9) Unknown

28. Traffic Control Device φ

- (0) No traffic control(s)
- (1) Traffic control signal (not RR crossing)

Regulatory

- (2) Stop sign
- (3) Yield sign
- (4) School zone sign
- (5) Other regulatory sign (specify): _____

- (6) Warning sign (not RR crossing)

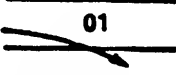
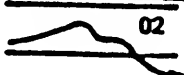
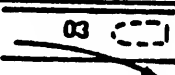
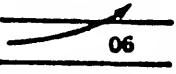
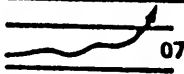
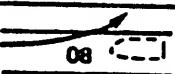
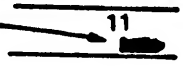

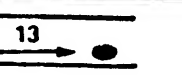
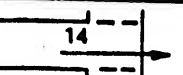
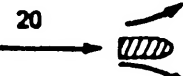
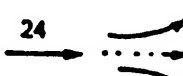
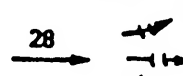
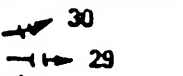
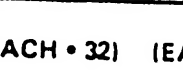
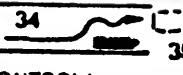
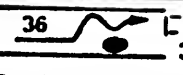

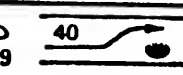
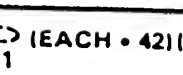
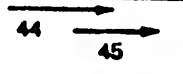
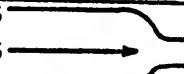
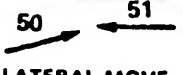
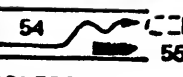
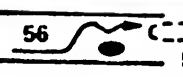
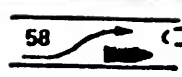
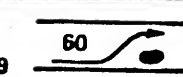
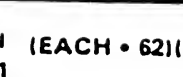

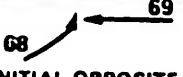
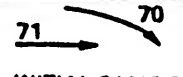
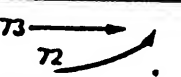
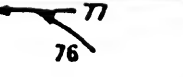
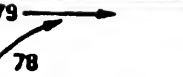
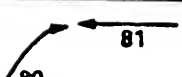
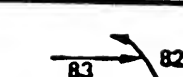
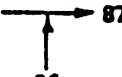



- (7) Unknown sign

- (8) Miscellaneous/other controls including RR controls (specify): _____

- (9) Unknown

29. Traffic Control Device Functioning φ

- (0) No traffic control device
- (1) Traffic control device not functioning (specify) _____
- (2) Traffic control device functioning properly
- (9) Unknown

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C. Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER
II. Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23	 24 SLOWER 25, 26, 27	 28 DECEL. 29, 30, 31	 30 (EACH • 32) SPECIFICS OTHER	 31 (EACH • 33) SPECIFICS UNKNOWN
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	 41 (EACH • 42) (EACH • 43) SPECIFICS OTHER SPECIFICS UNKNOWN
	F. Sideswipe Angle	 44 45	 46 45 47 (EACH • 48) SPECIFICS OTHER	(EACH • 49) SPECIFICS UNKNOWN		
III. Same Trafficway Opposite Direction	G. Head-On	 50 51 LATERAL MOVE	(EACH • 52) SPECIFICS OTHER	(EACH • 53) SPECIFICS UNKNOWN		
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	 61 (EACH • 62) (EACH • 63) SPECIFICS OTHER SPECIFICS UNKNOWN
	I. Sideswipe Angle	 64 65 LATERAL MOVE	(EACH • 66) SPECIFICS OTHER	(EACH • 67) SPECIFICS UNKNOWN		
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 69 INITIAL OPPOSITE DIRECTIONS	 71 70 INITIAL SAME DIRECTIONS	 73 72	(EACH • 74) (EACH • 75) SPECIFICS OTHER SPECIFICS UNKNOWN	
	K. Turn Into Path	 76 77 TURN INTO SAME DIRECTION	 79 78	 81 80	 83 82	(EACH • 84) (EACH • 85) SPECIFICS OTHER SPECIFICS UNKNOWN
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 86 87	 88 89	(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN	
VI. Miscellaneous	M. Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) 9 2
- (00) No driver present
 - (01) Attentive or not distracted
 - (02) Looked but did not see
 - (03) By other occupant(s), (specify): _____
 - (04) By moving object in vehicle (specify): _____
 - (05) While talking or listening to cellular phone (specify location and type of phone): _____
 - (06) While dialing cellular phone (specify location and type of phone): _____
 - (07) While adjusting climate controls
 - (08) While adjusting radio, cassette, CD (specify): _____
 - (09) While using other device/object in vehicle (specify): _____
 - (10) Sleepy or fell asleep
 - (11) Distracted by outside person, object, or event (specify): _____
 - (12) Eating or drinking
 - (13) Smoking related
 - (97) Distracted/inattentive, details unknown
 - (98) Other, distraction (specify): ALCOHOL RELATED
 - (99) Unknown
31. Pre-Event Movement (Prior to Recognition Of Critical Event) 1 4
- (00) No driver present
 - (01) Going straight
 - (02) Decelerating in traffic lane
 - (03) Accelerating in traffic lane
 - (04) Starting in traffic lane
 - (05) Stopped in traffic lane
 - (06) Passing or overtaking another vehicle
 - (07) Disabled or parked in travel lane
 - (08) Leaving a parking position
 - (09) Entering a parking position
 - (10) Turning right
 - (11) Turning left
 - (12) Making a U-turn
 - (13) Backing up (other than for parking position)
 - (14) Negotiating a curve
 - (15) Changing lanes
 - (16) Merging
 - (17) Successful avoidance maneuver to a previous critical event
 - (97) Other (specify): _____
 - (99) Unknown
32. Critical Precrash Event φ k
- This Vehicle Loss of Control Due To:*
- (01) Blow out or flat tire
 - (02) Stalled engine
 - (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
 - (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
 - (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
 - (06) Traveling too fast for conditions
 - (08) Other cause of control loss (specify): _____
 - (09) Unknown cause of control loss

This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (18) This vehicle decelerating
- (19) Unknown travel direction

Other Motor Vehicle In Lane

- (50) Other vehicle stopped
- (51) Traveling in same direction with lower steady speed
- (52) Traveling in same direction while decelerating
- (53) Traveling in same direction with higher speed
- (54) Traveling in opposite direction
- (55) In crossover
- (56) Backing
- (59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

Pedestrian, Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): _____
- (99) Unknown

33. Attempted Avoidance Maneuver

3

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability

2

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Precrash stability unknown

35. Pre-Impact Location

4

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type

2

(Note: Applicable codes on back of this page)

- (00) No impact
Code the number of the diagram that best describes the accident circumstance
- (98) Other accident type (specify):

(99) Unknown

STOP HERE IF GV07 DOES NOT EQUAL 01 - 49

OCCUPANT RELATED

37. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
38. Number of Occupants This Vehicle 2
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
39. Number of Occupant Forms Submitted 2

AIR BAG RELATED

40. Is this an AOPS Vehicle? 1
 (0) No (includes unknown)
 (1) Yes - researcher determined
 (2) VIN determined air bag system
 (3) VIN determined automatic (passive) belts
 (4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 1
 (0) Not equipped or not available
 (1) No air bags deployed
Single Air Bag Vehicle
 (2) Driver air bag deployed
 (3) Driver air bag, unknown if deployed
Multiple Air Bag Vehicle
 (4) Driver side only deployed
 (5) Passenger side only deployed
 (6) Driver and passenger side deployed
 (7) Driver and passenger side unknown if deployed
 (8) Air bag(s) deployed, details unknown
 (9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0
 (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight 1.4 0
 _____ Code weight to nearest 10 kilograms.
 (045) Less than 450 kilograms
 (610) 6,100 kilograms or more
 (999) Unknown
3.484 lbs X .4536 = 1.399 kgs

Source: _____

44. Vehicle Cargo Weight 0
 _____ Code weight to nearest 10 kilograms.
 (000) Less than 5 kilograms
 (450) 4,500 kilograms or more
 (999) Unknown

_____ lbs X .4536 = _____ kgs

Source: _____

ROLLOVER DATA

45. Rollover 4
 (00) No rollover (no overturning)
Rollover (primarily about the longitudinal axis)
 (01-16) Code the number of quarter turns
 (17) Rollover, 17 or more quarter turns (specify):
 (98) Rollover—end-over-end (i.e., primarily about the lateral axis)
 (99) Rollover (overturn), details unknown

46. Rollover Initiation Type 2
 (00) No rollover
 (01) Trip-over
 (02) Flip-over
 (03) Turn-over
 (04) Climb-over
 (05) Fall-over
 (06) Bounce-over
 (07) Collision with another vehicle
 (08) Other rollover initiation type (specify):
 (98) Rollover—end-over-end
 (99) Unknown rollover initiation type

47. Location of Rollover Initiation 3
 (0) No rollover
 (1) On roadway
 (2) On shoulder—paved
 (3) On shoulder—unpaved
 (4) On roadside or divided trafficway median
 (8) Rollover—end-over-end
 (9) Unknown

48. Rollover Initiation Object Contacted 6 8
 (Note: Applicable codes on back of page)

49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 4
 (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify):
 (6) Non-contact rollover forces (specify):
 (8) Rollover—end-over-end
 (9) Unknown

50. Direction of Initial Roll 1
 (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (8) Rollover—end-over-end
 (9) Unknown roll direction

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

Noncollision

- (31) Turn-over — fall-over
- (32) No rollover impact initiation (end-over-end)
- (34) Jackknife

Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)
(specify): _____

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify):
STEEL SUPPORT CABLE
- (69) Unknown fixed object

Collision with Nonfixed Object

- (70) Passenger car, light truck, van, or other vehicle not in-transport
- (71) Medium/heavy truck or bus not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify):

- (89) Unknown nonfixed object
- (98) Other event (specify):

- (99) Unknown event or object

OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) Φ
52. Rear Override/Underride (this Vehicle) Φ
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride
- Override (see specific CDC)*
[Between 2 CDS applicable vehicles (Bodytype, GV07=1-49)]
- (1) 1st CDC
 (2) 2nd CDC
 (3) Other not automated CDC (specify):

- Underride (see specific CDC)*
[Between 2 CDS applicable vehicles (Bodytype, GV07=1-49)]
- (4) 1st CDC
 (5) 2nd CDC
 (6) Other not automated CDC (specify):

- (7) Medium/heavy truck or bus override (of any configuration)
 (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
 (997) Noncollision
 (998) Impact with object
 (999) Unknown

53. Heading Angle For This Vehicle 9 9 8
54. Heading Angle For Other Vehicle 9 9 8

RECONSTRUCTION DATA

55. Towed Trailing Unit Φ
- (0) No towed unit
 (1) Yes—towed trailing unit
 (9) Unknown
56. Documentation of Trajectory Data for This Vehicle Φ
- (0) No
 (1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) Φ
- (0) Not collision (for highest delta V) with tree or pole
 (1) Not damaged
 (2) Cracked/sheared
 (3) Tilted <45 degrees
 (4) Tilted ≥45 degrees
 (5) Uprooted tree
 (6) Separated pole from base
 (7) Pole replaced
 (8) Other (specify):

- (9) Unknown

ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) Φ 5
- (00) No vehicle inspection
- Delta V Calculated*
- (01) Reconstruction program
 -damage only routine
 (02) Reconstruction program
 -damage and trajectory routine
 (03) Missing vehicle algorithm
- Delta V Not Calculated*
- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.

- (05) Rollover
 (06) Other non-horizontal forces
 (07) Sideswipe type damage
 (08) Severe override
 (09) Yielding object
 (10) Overlapping damage
 (11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available,

- (98) Other, (specify):

COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

9 9 9

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

60. Longitudinal Component of
Delta VHighest
+ 9 9 9

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means greater than
-0.5 kmph and less than +0.5 kmph)

(±160) ±159.5 kmph and above

(999) Unknown

61. Lateral Component of Delta V

Highest
+ 9 9 9

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means greater than -0.5 kmph and
less than +0.5 kmph)

(±160) ±159.5 kmph and above

(999) Unknown

62. Energy Absorption

9 9 9 9 0 0

_____ Nearest 100 joules (highest)

_____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)

(9997) 999,650 joules or more

(9999) Unknown

63. Impact Speed

Highest
9 9 8

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means
less than 0.5 kmph)

(160) 159.5 kmph and above

(998) Trajectory algorithm not run

(999) Unknown

DELTA V CONFIDENCE LEVEL64. Confidence In Reconstruction Program
Results (For Highest Delta V)

(0) No reconstruction

(1) Collision fits model — results appear
reasonable

(2) Collision fits model — results appear high

(3) Collision fits model — results appear low

(4) Borderline reconstruction — results appear
reasonableφ**OTHER SPEED ESTIMATE**65. Barrier Equivalent
SpeedHighest
9 9 9

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means
less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

IS MISSING VEHICLE ALGORITHM APPLICABLE FOR THIS VEHICLE? [] YES ☒ NOIF YES: IS A COMPLETED PROGRAM SUMMARY INCLUDED? [] YES ☒ NO

ESTIMATED DELTA V

VEHICLE INSPECTION

66. Estimated Highest Delta V (Researcher
Determined)7

(0) Reconstruction Delta V coded

Estimated Delta V

- (1) Less than 10 kmph
- (2) ≥ 10 kmph but < 25 kmph
- (3) ≥ 25 kmph but < 40 kmph
- (4) ≥ 40 kmph but < 55 kmph
- (5) ≥ 55 kmph

Other estimates of damage severity

- (6) Minor
- (7) Moderate
- (8) Severe
- (9) Unknown

67. Type of Vehicle Inspection

3

- (0) No inspection
- (1) Vehicle fully repaired-no damage evident
- (2) Partial inspection (specify):

- (3) Complete inspection

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67=0), ***

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



EXTERIOR VEHICLE FORM

BEST AVAILABLE

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number _____

3. Vehicle Number Φ 12. Case Number - Stratum DSI-95-AB-Φ5

VEHICLE IDENTIFICATION

VIN 1 F A L P 5 2 4 3 P 6 Model Year 93Vehicle Make (specify): FORD Vehicle Model (specify): TAURUS (GL)

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
Φ1	FRONT Bumper →		ZONE 1
Φ2	UNDERCARRIAGE →		
Φ3	TOP	ACROSS TOP	ZONE 2

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage		Field L	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	±D
		Width (CDC)	Max Crush								
Φ1	Bumper	16.5 cm	30.5 cm	163.5	16 Φ					15.7	
	Free Space		33.7		18.8					18.3	
	CRUSH		Φ		Φ					Φ	Φ
Φ2	UNDERCARRIAGE NONE TAKEN										
Φ3	TOP NONE TAKEN	337.2 cm									

Two crush measurements were taken at the bumper mounting brackets, and max crush was estimated to be at center frame rail. See photos # 065-070.

Crush measured turned out to be non-horizontal and thus yielded 0 crush.

EXTERIOR VEHICLE FORM

1. Primary Sampling Unit Number	_____	3. Vehicle Number	<u>6</u> <u>1</u>
2. Case Number - Stratum	DSI- <u>95</u> - <u>AB</u> - <u>05</u>		

VEHICLE IDENTIFICATION

VIN 1 F A L P 5 2 4 3 P 6 _____ Model Year 9 3
 Vehicle Make (specify): FORD Vehicle Model (specify): TAURUS (GL)

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
05	FRONT / UNDERCARRIAGE	→	
06	BACK BUMPER	ACROSS BACK BUMPER	Zone 1

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

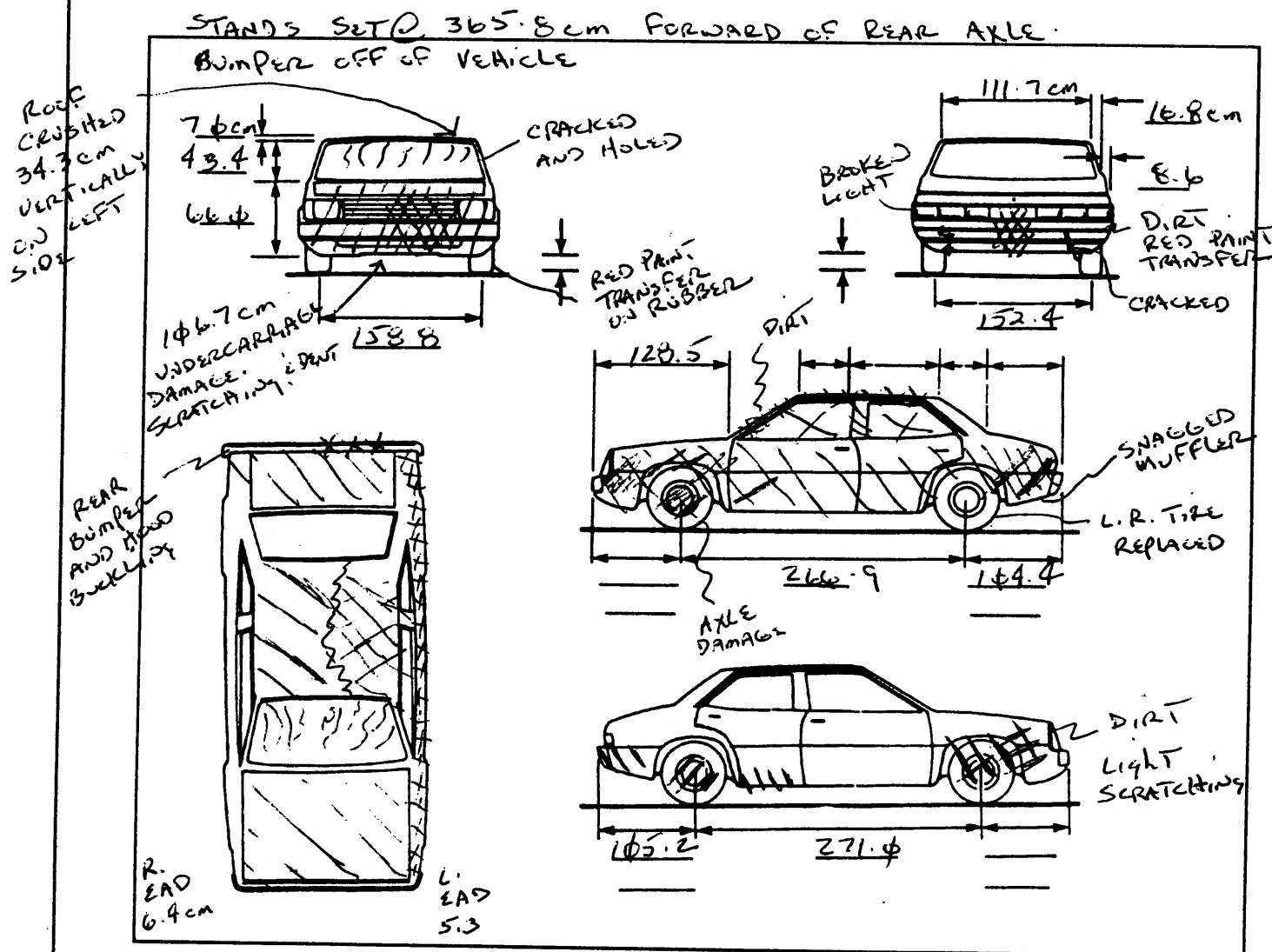
Use as many lines/columns as necessary to describe each damage profile.

[illegible]

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE a. Rotation physically restricted b. Tire deflated RF <u>2</u> RF <u>1</u> LF <u>2</u> LF <u>2</u> RR <u>2</u> RR <u>9</u> LR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		ORIGINAL SPECIFICATIONS Wheelbase <u>269.2</u> cm Overall Length <u>481.7</u> cm Maximum Width <u>184.8</u> cm Curb Weight <u>1398.9</u> kg Average Track <u>N/A</u> cm Front Overhang <u>142.1</u> cm Rear Overhang <u>117.1</u> cm Undeformed End Width <u>146.1</u> cm Engine Size: cyl./displ. <u>V6/3.5</u> L		WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only) RF \pm _____ ° LF \pm _____ ° RR \pm _____ ° LR \pm _____ ° Within \pm 5 degrees	
TYPE OF TRANSMISSION <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic END SHIFT \geq 10 CM <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				DRIVE WHEELS <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD	
				Approximate Cargo Weight _____ kg	

MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision

- (31) Overturn — rollover (excludes end-over-end)
(32) Rollover—end-over-end
(33) Fire or explosion
(34) Jackknife
(35) Other intraunit damage (specify):

(36) Noncollision injury

(38) Other noncollision (specify):

(39) Noncollision — details unknown

Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
(42) Tree (> 10 cm in diameter)
(43) Shrubbery or bush
(44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
 (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
 (52) Pole or post (> 30 cm in diameter)
 (53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail)
(specify):

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge

(68) Other fixed object (specify):

② STEEL SUPPORT CABLE ⑤ ROCK

(69) Unknown fixed object

Collision with Nonfixed Object

- (70) Passenger car, light truck, van, or other vehicle not in-transport
(71) Medium/heavy truck or bus not in-transport
(72) Pedestrian
(73) Cyclist or cycle
(74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) **Animal**

(77) Train

(78) Trailer, disconnected in transport

(79) Object fell from vehicle in-transport

(88) Other nonfixed object (specify):

(89) Unknown nonfixed object

(98) Other event (specify):

(99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

[illegible]

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>Φ 3</u>	5. <u>3 1</u>	6. <u>Φ Φ</u>	7. <u>I</u>	8. <u>Y</u>	9. <u>D</u>	10. <u>O</u>	11. <u>Φ 4</u>

Second Highest Delta "V"

12. <u>Φ 1</u>	13. <u>5 4</u>	14. <u>1 2</u>	15. <u>F</u>	16. <u>C</u>	17. <u>E</u>	18. <u>N</u>	19. <u>Φ 1</u>
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CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	22. <u>±D</u>
<u>3 3 7</u>							<u>+</u>
							<u>-</u>

Second Highest Delta "V"

23. <u>L</u>	24. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	25. <u>±D</u>
<u>1 4 4</u>	<u>Φ Φ Φ</u>	<u>Φ Φ Φ</u>					<u>+</u>
							<u>-</u>

26. Undeformed End Width

(Coded when highest severity impact is an end plane impact.)

Code to the nearest centimeter

(250) 250 centimeters or more

(998) No highest severity end plane impact

(999) Unknown

1 4 4

27. Direct Damage Width

(For highest severity impact)

Code to the nearest centimeter

(250) 250 centimeters or more

(999) Unknown

Φ 1 7

28. Original Wheelbase

Code to the nearest centimeter

(650) 650 centimeters or more

(999) Unknown

inches X 2.54 = centimeters

2 6 9

29. Original Average Track Width

Code to the nearest centimeter

(185) 185 centimeters or more

(999) Unknown

inches X 2.54 = centimeters

9 9 9

FUEL SYSTEM

30. Are CDCs Documented but Not Coded on The Automated File? 1
 (0) No
 (1) Yes
31. Researcher's Assessment of Vehicle Disposition 1
 (0) Not towed due to vehicle damage
 (1) Towed due to vehicle damage
 (9) Unknown
32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? φ
 (0) No post manufacturer modifications
 (1) Yes - post manufacturer modifications (specify): _____

 (Include photograph of CERTIFICATION PLACARD in case report)
 (9) Unknown if vehicle is modified

FIRE OCCURRENCE

33. Fire Occurrence φ
 (0) No fire
 Yes, fire occurred
 (1) Minor
 (2) Major
 (9) Unknown
34. Origin of Fire φ
 (0) No fire
 (1) Vehicle exterior (front, side, back, top)
 (2) Exhaust system
 (3) Fuel tank (and other fuel retention system parts)
 (4) Engine compartment
 (5) Cargo/trunk compartment
 (6) Instrument panel
 (7) Passenger compartment area
 (8) Other location (specify): _____
 (9) Unknown

35. Location of Fuel Tank-1 Filler Cap 3
36. Location of Fuel Tank-2 Filler Cap φ
 (0) No fuel tank
 (1) On back plane
 (2) Aft of center of the rear wheels (rear axle) on left side plane
 (3) Aft of center of the rear wheels (rear axle) on right side plane
 (4) Forward of center of the rear wheels (rear axle) on left side plane
 (5) Forward of center of the rear wheels (rear axle) on right side plane
 (6) Over the center of the rear wheels (rear axle) on left side plane
 (7) Over the center of the rear wheels (rear axle) on right side plane
 (8) Other (specify): _____
 (9) Unknown
37. Type of Fuel Tank-1 1
38. Type of Fuel Tank-2 φ
 (0) No fuel tank (electrical vehicle)
 (1) Metallic
 (2) Non-metallic
 (9) Unknown
39. Location of Fuel Tank-1 4
40. Location of Fuel Tank-2 φ
 (0) No fuel tank
 (1) Aft of center of the rear wheels (rear axle) centered
 (2) Aft of center of the rear wheels (rear axle) left side
 (3) Aft of center of the rear wheels (rear axle) right side
 (4) Forward of center of the rear wheels (rear axle) centered
 (5) Forward of center of the rear wheels (rear axle) left side
 (6) Forward of center of the rear wheels (rear axle) right side
 (7) Over center of the rear wheels (rear axle)
 (8) Other (specify): _____
 (9) Unknown
41. Damage to Fuel Tank-1 1
42. Damage to Fuel Tank-2 φ
 (0) No fuel tank
 (1) No damage to fuel tank
 (2) Deformed, no seam failure
 (3) Deformed, with a seam failure
 (4) Punctured
 (5) Lacerated (ripped)
 (6) Abraded (scraped)
 (7) Filler neck separation from the fuel tank
 (8) Other damage (specify): _____
 (9) Unknown

43. Leakage Location of Fuel System-1

1

44. Leakage Location of Fuel System-2

Φ

- (0) No fuel tank
(1) No fuel leakage

Primary Area Of Leakage

- (2) Tank
(3) Filler neck
(4) Cap
(5) Lines/pump/filter
(6) Vent/emission recovery
(8) Other (specify): _____
(9) Unknown

45. Fuel Type-1

Φ 1

46. Fuel Type-2

Φ Φ*Single Fuel Type*

- (00) No fuel tank
(01) Gasoline
(02) Diesel
(03) CNG (Compressed Natural Gas)
(04) LPG (Liquid Petroleum Gas) also known as Propane
(05) LNG (Liquid Natural Gas)
(06) Methanol (M100 or M85)
(07) Ethanol (E100 or E85)
(08) Other (Hydrogen or others) (specify): _____

Electric Powered or Electric/Solar Powered Vehicles

- (10) Lead Acid Battery
(11) Nickel-Iron Battery
(12) Nickel-Cadmium Battery
(13) Sodium Metal Chloride Battery
(14) Sodium Sulfur Battery
(18) Other (Specify): _____

(98) Other Hybrid (specify): _____

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks?

Φ

(0) No (one or two tanks only)

Yes - More Than Two Tanks(1) Yes – no damage to any tank or filler cap and no fuel system leakage(2) Yes – no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): _____(3) Yes – damage to an additional tank or filler cap and there is fuel system leakage (specify the following):

Type of tank _____

Tank location _____

Filler cap location _____

Tank damage _____

Location of leakage _____

Type of fuel _____

(9) Unknown if more than two tanks

COMMENTS

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED ***

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum DSI-95-AB-453. Vehicle Number 41

INTEGRITY

4. Passenger Compartment Integrity

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 3 6. RF 1 7. LR 3 8. RR 1 9. TG/H 4

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch
Opening in Collision. If IV05-IV09 = 2, Then code 010. LF 4 11. RF 4 12. LR 4 13. RR 4 14. TG/H 4

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail,
etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 220. BL 2 21. Roof 4 22. Other 2

(0) No glazing

(1) AS-1 — Laminated

(2) AS-2 — Tempered

(3) AS-3 — Tempered-tinted (original)

(4) AS-2 — Tempered-with after market tint

(5) AS-3 — Tempered-tinted (with additional after market tint)

(6) AS-14 — Glass/Plastic

(7) Glazing removed prior to accident

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 4 25. RF 2 26. LR 2 27. RR 228. BL 1 29. Roof 4 30. Other 1

(0) No glazing

(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(7) Glazing removed prior to accident

(9) Unknown

Glazing Damage from Impact Forces

31. WS 3 32. LF 4 33. RF 1 34. LR 1 35. RR 436. BL 4 37. Roof 4 38. Other 1

(0) No glazing

(1) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from impact
forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 1 40. LF 1 41. RF 1 42. LR 1 43. RR 144. BL 1 45. Roof 4 46. Other 1

(0) No glazing

(1) No occupant contact to glazing

(2) Glazing contacted by occupant but no glazing damage

(3) Glazing in place and cracked by occupant contact

(4) Glazing in place and holed by occupant contact

(5) Glazing out-of-place (cracked or not) by occupant
contact and not holed by occupant contact(6) Glazing out-of-place by occupant contact and holed by occupant
contact

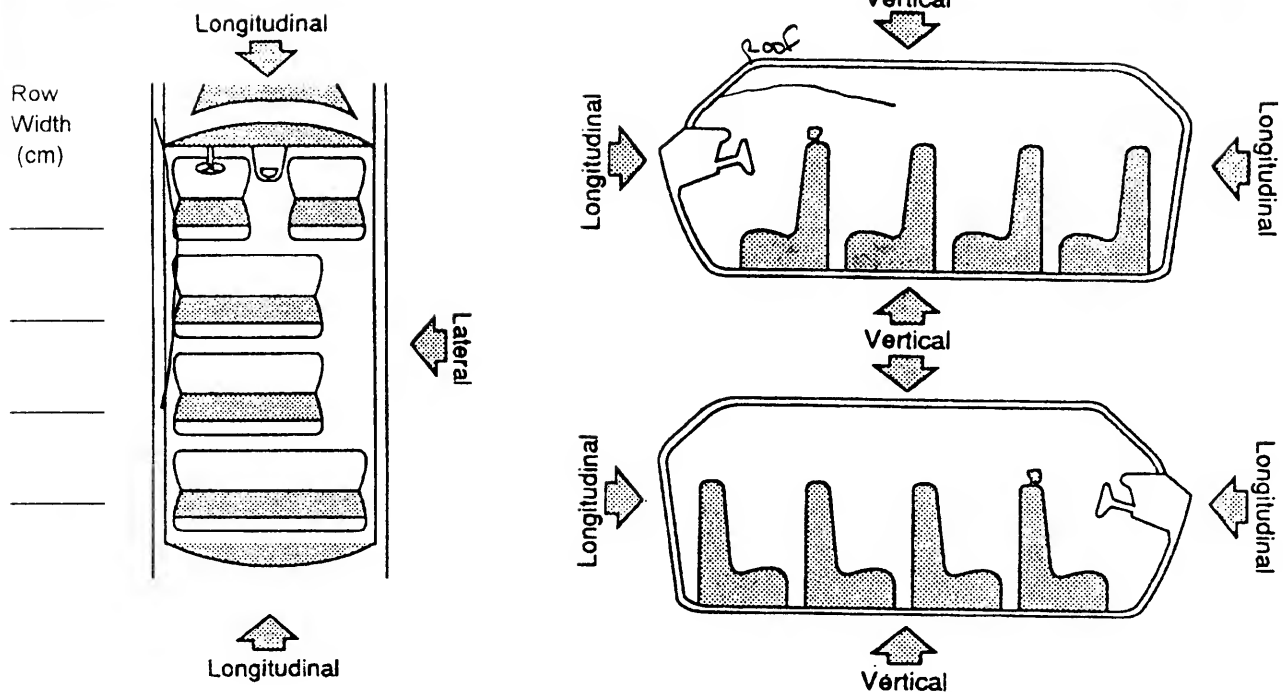
(7) Glazing removed prior to accident

(8) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)				DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	=	INTRUSION	
11	$\phi 6$	144.9	146.7	=	1.8	3
11	$\phi 7$	143.1	144.1	=	1.0	3
11	13	111.8	141.6	=	14.2	1
11	$\phi 6$	142.9	88.9	=	14.0	1
11	$\phi 7$	144.1	99.1	=	5.0	1
11	16	147.9	97.8	=	14.1	1
11	17	147.9	88.9	=	19.0	1
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>1</u> <u>1</u>	48. <u>1</u> <u>7</u>	49. <u>2</u>	50. <u>1</u>
2nd	51. <u>1</u> <u>1</u>	52. <u>0</u> <u>6</u>	53. <u>2</u>	54. <u>1</u>
3rd	55. <u>1</u> <u>1</u>	56. <u>1</u> <u>3</u>	57. <u>2</u>	58. <u>3</u>
4th	59. <u>1</u> <u>1</u>	60. <u>1</u> <u>6</u>	61. <u>2</u>	62. <u>1</u>
5th	63. <u>1</u> <u>1</u>	64. <u>0</u> <u>7</u>	65. <u>1</u>	66. <u>1</u>
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

LOCATION OF INTRUSION

Front Seat
 (11) Left
 (12) Middle
 (13) Right

Second Seat
 (21) Left
 (22) Middle
 (23) Right

Third Seat
 (31) Left
 (32) Middle
 (33) Right

Fourth Seat
 (41) Left
 (42) Middle
 (43) Right

(97) Catastrophic
 (98) Other enclosed area (specify)

(99) Unknown

INTRUDING COMPONENT

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): _____

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

MAGNITUDE OF INTRUSION

- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

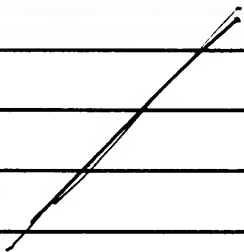
COMPARISON VALUE

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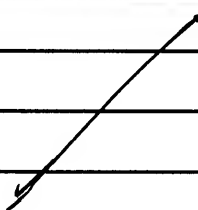
DAMAGE VALUE

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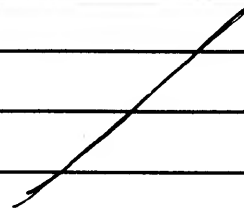
DEFORMATION



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STEERING COLUMN**INSTRUMENT PANEL**87. Steering Column Type 2

- (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify): _____

(9) Unknown

88. Tilt Steering Column Adjustment 3

- (0) No tilt steering column
 (1) Full up
 (2) Between full up and center
 (3) Center
 (4) Between center and full down
 (5) Full down
 (9) Unknown

89. Telescoping Steering Column Adjustment φ

- (0) No telescoping steering column
 (1) Full back
 (2) Between full back and midpoint
 (3) Midpoint
 (4) Between midpoint and full forward
 (5) Full forward
 (9) Unknown

90. Steering Rim/Spoke Deformation φ φ

- Code actual measured deformation to the nearest centimeter
 (00) No steering rim deformation
 (01-14) Actual measured value in centimeters
 (15) 15 centimeters or more
 (98) Observed deformation cannot be measured
 (99) Unknown

91. Location of Steering Rim/Spoke Deformation φ φ

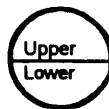
- (00) No steering rim deformation

Quarter Sections

- (01) Section A
 (02) Section B
 (03) Section C
 (04) Section D

*Half Sections*

- (05) Upper half of rim/spoke
 (06) Lower half of rim/spoke
 (07) Left half of rim/spoke
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse
 (10) Undetermined location
 (99) Unknown

92. Odometer Reading φ 54,000

- _____ kilometers
 Code to the nearest 1,000 kilometers
 (000) No odometer
 (001) Less than 1,500 kilometers
 (500) 499,500 kilometers or more
 (999) Unknown

2351 φ miles X 1.6093 = 53,927 kilometers

Source: _____

93. Instrument Panel Damage from Occupant Contact? φ

- (0) No
 (1) Yes
 (9) Unknown

94. Type of Knee Bolster Covering 2

- (0) No knee bolster
 (1) Padded
 (2) Rigid plastic
 (8) Other (specify): _____
 (9) Unknown

95. Knee Bolsters Deformed from Occupant Contact? 1

- (0) No knee bolster
 (1) No deformation
 (2) Yes - deformation
 (9) Unknown

96. Did Glove Compartment Door Open During Collision(s)? 1

- (0) No glove compartment door
 (1) No - door did not open
 (2) Yes - door opened
 (9) Unknown

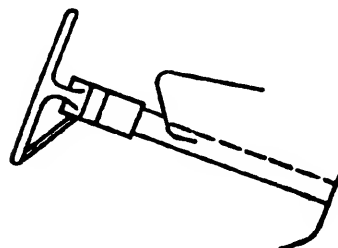
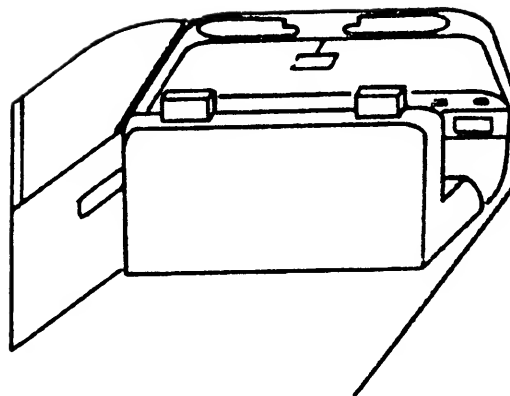
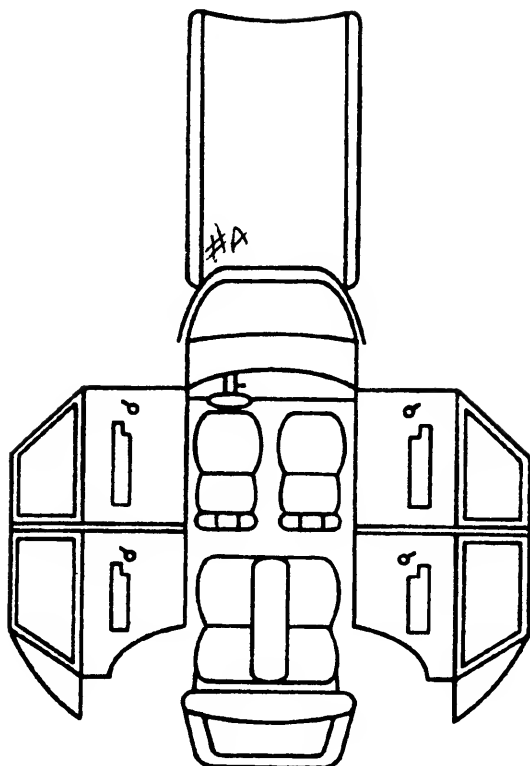
97. Adaptive (Assistive) Driving Equipment φ

- (0) No adaptive driving equipment
 (1) Adaptive driving equipment installed (Check all that apply.)
☐ Hand controls for braking/acceleration
☐ Steering control devices (attached to OEM steering wheel)
☐ Steering knob attached to steering wheel
☐ Low effort power steering (unit or device)
☐ Replacement steering wheel (i.e., reduced diameter)
☐ Joy-stick steering controls
☐ Wheelchair tie-downs
☐ Modification to seat belts (specify): _____
☐ Additional or relocated switches (specify): _____
☐ Raised roof
☐ Wall-mounted head rest (used behind wheelchair)
☐ Other adaptive device (specify): _____

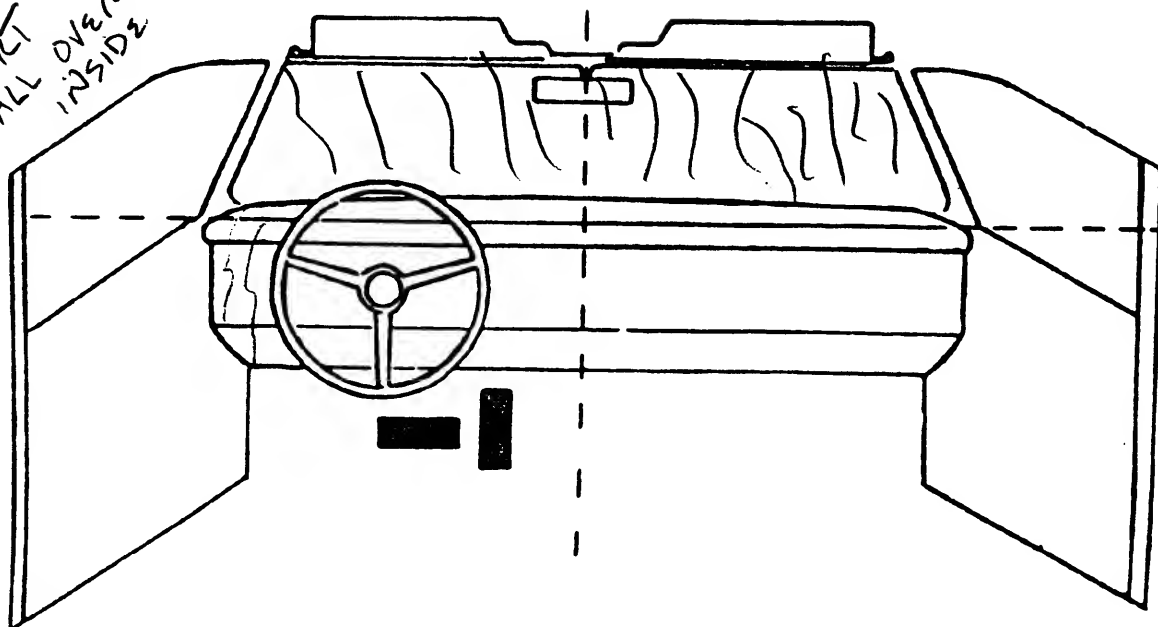
(9) Unknown

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



DIRT
ALL OVER
INSIDE



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	245	11	HEAD	INJURIES SUSTAINED	2
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

FRONT

- (001) Windshield
 (002) Mirror
 (003) Sunvisor
 (004) Steering wheel rim
 (005) Steering wheel hub/spoke
 (006) Steering wheel (combination of codes 004 and 005)
 (007) Steering column, transmission selector lever, other attachment
 (008) Cellular telephone or CB radio
 (009) Add on equipment (e.g., tape deck, air conditioner)
 (010) Left instrument panel and below
 (011) Center instrument panel and below
 (012) Right instrument panel and below
 (013) Glove compartment door
 (014) Knee bolster
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
 (017) Windshield reinforced by exterior object, (specify):
 (019) Other front object (specify):

CODES FOR INTERIOR COMPONENTS

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
 (052) Left side hardware or armrest
 (053) Left A (A1/A2)-pillar
 (054) Left B-pillar
 (055) Other left pillar (specify):
 (056) Left side window glass
 (057) Left side window frame
 (058) Left side window sill
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 (060) Other left side object (specify):

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests
 (102) Right side hardware or armrest
 (103) Right A (A1/A2)-pillar
 (104) Right B-pillar
 (105) Other right pillar (specify):
 (106) Right side window glass
 (107) Right side window frame
 (108) Right side window sill
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 (110) Other right side object (specify):

INTERIOR

- (151) Seat, back support
 (152) Belt restraint webbing/buckle
 (153) Belt restraint B-pillar or door frame attachment point
 (154) Other restraint system component (specify):
 (155) Head restraint system
 (160) Other occupants (specify):
 (161) Interior loose objects
 (162) Child safety seat (specify):
 (163) Other interior object (specify):

AIR BAG

- (170) Air bag-driver side
 (175) Air bag compartment cover-driver side
 (180) Air bag-passenger side
 (185) Air bag compartment cover-passenger side
 (190) Other air bag (specify):
 (195) Other air bag compartment cover (specify):

ROOF

- (201) Front header
 (202) Rear header
 (203) Roof left side rail
 (204) Roof right side rail
 (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
 (252) Floor or console mounted transmission lever, including console
 (253) Parking brake handle
 (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
 (302) Backlight storage rack, door, etc.
 (303) Other rear object (specify):

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
 (402) Steering control devices (attached to OEM steering wheel)
 (403) Steering knob attached to steering wheel
 (405) Replacement steering wheel (i.e., reduced diameter)
 (406) Joy stick steering controls
 (407) Wheelchair tie-downs
 (408) Modification to seat belts, (specify):
 (409) Additional or relocated switches, (specify):
 (410) Raised roof
 (411) Wall mounted head rest (used behind wheel chair)
 (412) Other adaptive device (specify):

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
 (2) Probable
 (3) Possible
 (9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	3	4
	Evidence of usage	04	99	04
	Used in this crash?	NO	NO	YES
	Proper Use	0	0	1
	Failure Modes	0	1	1
	Anchorage Adjustment	1	0	1
SECOND	Availability	4	3	4
	Evidence of usage	04	03	04
	Used in this crash?	NO	NO	NO
	Proper Use	0	0	0
	Failure Modes	0	0	0
	Anchorage Adjustment	0	0	0
OTHER	Availability			
	Evidence of usage	/	/	/
	Used in this crash?			
	Proper Use			
	Failure Modes			
	Anchorage Adjustment			

Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):

(9) Unknown

Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Left Front	Right Front	Other
FIRST	Availability/Function	1	1	Ø
	Deployment	7	7	Ø
	Failure	7	7	Ø

Air Bag System Availability/Function (0) Not equipped/not available (1) Air bag <i>Non-functional</i> (2) Air bag disconnected (specify): _____ (3) Air bag not reinstalled (9) Unknown	Frontal Air Bag System Deployment (This Occupant Position) (0) Not equipped/not available (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, accident sequence undetermined (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown	Air Bag(s) Deployment, <u>Other</u> Than First Seat Frontal (This Occupant Position) (0) Not equipped with an "other" air bag (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown
--	--	---

Are There Indications of Air Bag System Failure? (This Occupant Position) (0) Not equipped/not available (1) No (2) Yes (specify): _____ (9) Unknown

AUTOMATIC BELTS

		Left	Right
FIRST	Availability/Function	Ø	Ø
	Use	Ø	Ø
	Type	Ø	Ø
	Proper Use	Ø	Ø
	Failure Modes	Ø	Ø

Automatic (Passive) Belt System Availability/Function (0) Not equipped/not available (1) 2 point automatic belts (2) 3 point automatic belts (3) Automatic belts - type unknown <i>Non-functional</i> (4) Automatic belts destroyed or rendered inoperative (9) Unknown	Proper Use of Automatic (Passive) Belt System (0) Not equipped/not available/not used (1) Automatic belt used properly (2) Automatic belt used properly with child safety seat <i>Automatic Belt Used Improperly</i> (3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____ (8) Other improper use of automatic belt system (specify): _____ (9) Unknown	Automatic (Passive) Belt Failure Modes During Accident (0) Not equipped/not available/not in use (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): _____ (6) Broken retractor (7) Combination of above (specify): _____ (8) Other automatic belt failure (specify): _____ (9) Unknown
---	--	--

Automatic (Passive) Belt System Use (0) Not equipped/not available/destroyed or rendered inoperative (1) Automatic belt in use (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (3) Automatic belt use unknown (9) Unknown	Automatic (Passive) Belt System Type (0) Not equipped/not available (1) Non-motorized system (2) Motorized system (9) Unknown
--	--

FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data **for the driver and first seat passenger** in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
Type of air bag?	1	1
Flaps open at tear points?	7	7
Flaps damaged?	7	7
Air bag damaged?	97	97
Source of air bag damage	97	97
Air bag tethered?	7	7
Air bag have vent ports?	7	7
Other occupant contact air bag?	7	7
Occupant wearing eyewear?	7	7

Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):

- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):

- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

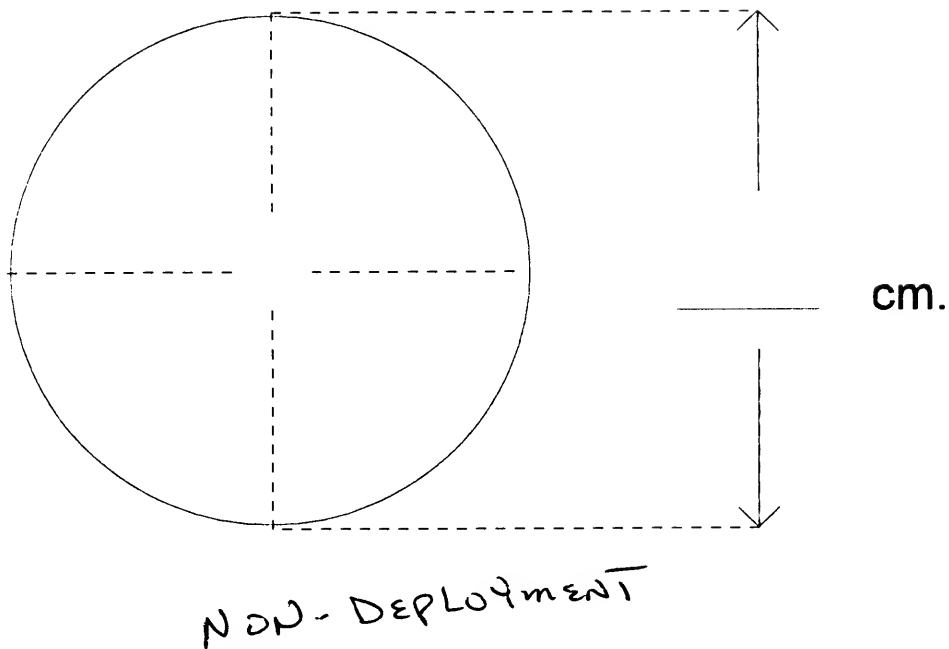
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

Was This Occupant Wearing Eye-wear?

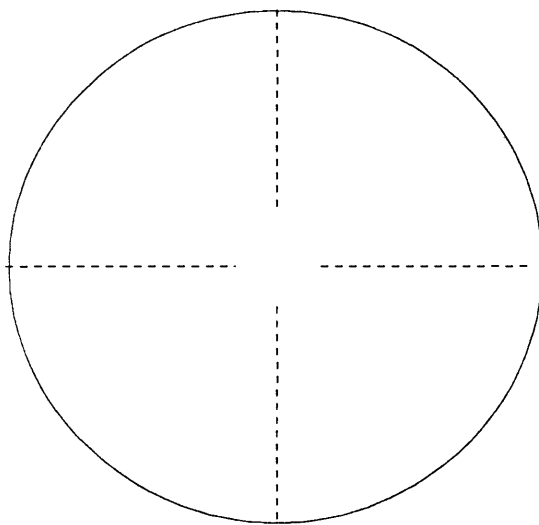
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)

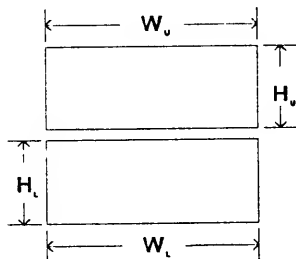


DRIVER AIR BAG SKETCHES (Cont'd)

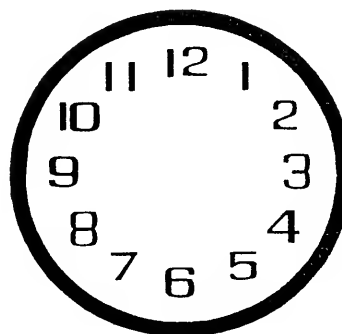
3. DRIVER AIR BAG MODULE COVER FLAP SIZE
(DOUBLE)

a. Upper Flap

b. Lower Flap

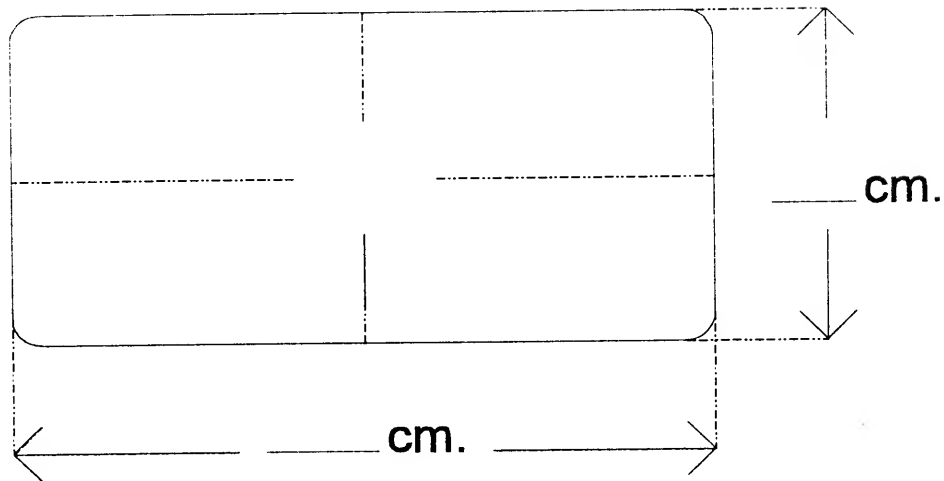
width (W_U) _____ width (W_L) _____height (H_U) _____ height (H_L) _____4. SKETCH OF OTHER TYPE OF AIR BAG MODULE
FLAP AND SIZE

5. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

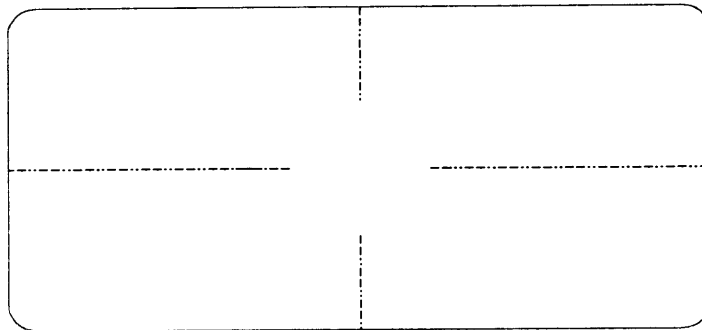
6. SKETCH LOCATION OF CIRCULAR AIR BAG VENT
PORTS

PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)



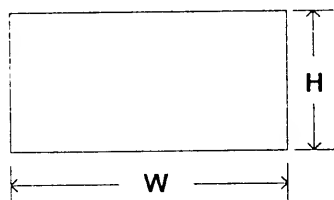
PASSENGER AIR BAG SKETCHES (Cont'd)

3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

a. Flap

width (W) _____

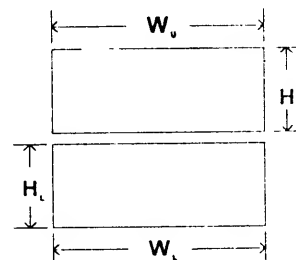
height (H) _____



4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

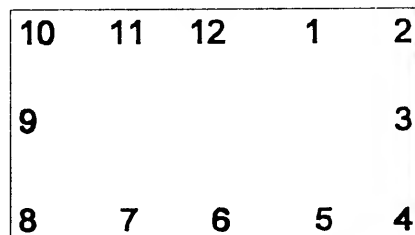
b. Lower Flap

width (W_U) _____width (W_L) _____height (H_U) _____height (H_L) _____

5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

"OTHER" AIR BAG SKETCHES (Cont'd)

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	φ	3
	Seat Type	φ6	φ6	φ6
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
	Seat Track Position	3	5	5
	Seat Back Incline Pre/Post Impact	14	14	14
SECOND	Head Restraint Type/Damage	φ	φ	φ
	Seat Type	φ3	φ3	φ3
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
	Seat Track Position	1	1	1
	Seat Back Incline Pre/Post Impact	φ1	φ1	φ1
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

HEAD RESTRAINTS/SEAT EVALUATION

Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other
- (9) Unknown

Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

Seat Orientation (this Occupant Position)

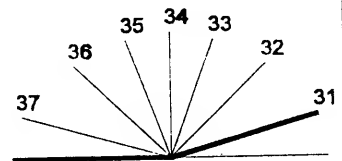
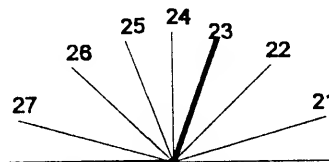
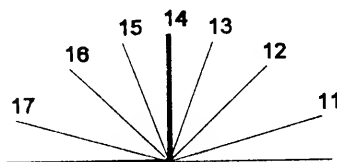
- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____
- (9) Unknown

Seat Track Adjusted Position Prior To Impact

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track
- Adjustable Seat Track*
- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

Seat Back Incline Prior and Post Impact

- (00) Occupant not seated or no seat
- (01) Not adjustable
- Upright prior to impact*
- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position
- Slightly reclined prior to impact*
- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position
- Completely reclined prior to impact*
- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position
- (99) Unknown



Coding diagrams for Seat Back Incline Position Prior and Post Impact

**DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)**

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):
- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):
- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):
- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):
- (29) Unknown orientation

- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No ☒ Yes []

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

Ejection Area

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

(7) Roof

(8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

Ejection Medium

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

(5) Integral structure

(8) Other medium (specify):

(9) Unknown

Medium Status (Immediately Prior to Impact)

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

ENTRAPMENT No ☒ Yes []

Describe entrapment mechanism:

Component(s):

(Note in vehicle interior diagram)

Interview Form

Case Number: DSI-95-AB-05
Vehicle Number: 01
Interviewee: Driver
Accident Date/Time: '95 / 0319 Hours

Description of Accident

It was raining hard and the ground was very wet. I was northbound on XXXXXXX at well below the posted speed limit. I really am very fuzzy as to what happened before or after the accident. I think that the right front tire hooked the gravel and I ran off the road, and rolled over. What happened after this is very fuzzy. I do remember that the car was upright on all four wheels when we came to a stop at the bottom of the hill.

Seat Position	Left Front	Right Front	
Age/Sex	21/Male	20/Male	
Height/Weight	64"/130 Lbs..	66"/160 Lbs..	
Posture	Normal	Normal	
Ejection	No	No	
Entrapment	No	No	
Restraint Type	Lap/Shoulder	Lap/Shoulder	
Usage/Failures	Used??/No failures	Used/No failures	
Treatment	Hospitalized	None	
Time in hospital	3 days	None	
Lost working days	1 ½	None	
Glasses or Contact Lenses? [Y/N] Describe:	NA	NA	
Related Glasses/Contact Lenses Injuries:	NA	NA	

Cargo: None

National Highway Traffic Safety
AdministrationNATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number _____

2. Case Number - Stratum DSI-95-AB-453. Vehicle Number φ 14. Occupant Number φ 1

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 2 1

Code actual age at time of accident.

(00) Less than one year old (specify by month): _____

(97) 97 years and older _____

(99) Unknown

6. Occupant's Sex 1

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height 1 6 3Code actual height to the nearest
centimeter.

(999) Unknown

64 inches X 2.54 = _____ centimeters8. Occupant's Weight φ 5 9Code actual weight to the nearest
kilogram.

(999) Unknown

13 φ pounds X .4536 = _____ kilograms9. Occupant's Role 1

(1) Driver

(2) Passenger

(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position 1 1

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): _____

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): _____

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): _____

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): _____

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): _____

(99) Unknown

11. Occupant's Posture φ

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of
seat

(8) Other abnormal posture (specify): _____

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

φ

13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

φ

14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

φ

15. Medium Status (Immediately Prior To Impact)

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

φ

16. Entrapment

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.

(specify): DOOR JAMMED, EXITED
ON OTHER SIDE

2

- (9) Unknown

17. Occupant Mobility

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

4

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): _____

(9) Unknown

19. Manual (Active) Belt System Use φ φ

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify): _____

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts φ

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident φ

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

- (6) Broken retractor
- (7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown

22. Shoulder Belt Upper Anchorage Adjustment 1

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function φ

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use φ

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type φ

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System φ

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify): _____

- (8) Other improper use of automatic belt system (specify): _____
- (9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident φ

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other automatic belt failure (specify): _____

(9) Unknown

POLICE REPORTED RESTRAINT USE

AIR BAG SYSTEM FUNCTION

28. Police Reported Belt Use 4

- (0) None used
 (1) Police did not indicate belt use
 (2) Shoulder belt
 (3) Lap belt
 (4) Lap and shoulder belt
 (5) Belt used, type not specified
 (6) Child safety seat
 (7) Automatic belt
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 3

- (0) No air bag available
 (1) Police did not indicate air bag availability/function
 (2) Deployed
 (3) Not deployed
 (4) Unknown if deployed
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☐ Not equipped/not available/destroyed or rendered inoperative
☒ Vehicle inspection
☐ Official injury data
☐ Driver/occupant interview
☐ Other (specify):

☐ Unknown if belt used

30. Frontal Air Bag System Availability/Function 1
(This Occupant Position)

- (0) Not equipped/not available
 (1) Air bag

Non-functional

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
 (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 7

- (0) Not equipped/not available
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function Φ
(This Occupant Position)

- (0) Not equipped/not available
 (1) Air bag

Non-functional

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
 (9) Unknown

Specify type of "other" air bag present:

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) Φ

- (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

34. Are There Indications of Air Bag System Failure? 1
(This Occupant Position)

- (0) Not equipped/not available
 (1) No
 (2) Yes (specify):

(9) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

- (0) Not equipped/not available
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)
(3) One previous accident with deployment
(4) More than one previous accident with at least one deployment
(8) Previous accidents, unknown deployment status
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available
(1) Original manufacturer installed system
(2) Retrofitted air bag
(3) Replacement air bag
(8) Unknown type of air bag
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1

- (0) Not equipped/not available
(1) No prior maintenance
(2) Yes, prior maintenance (specify): _____

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 97

- (00) Not equipped/not available

Code the accident event sequence number that initiated the air bag deployment

- (96) Deployed, unknown event
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

39. CDC For Air Bag Deployment Impact 7

- (0) Not equipped/not available
(1) Highest delta V
(2) Second highest delta V
(3) Other non-coded delta V (specify): _____

- (6) Deployed, unknown event
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 997

- (-000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

- (-996) Deployment, unknown longitudinal Delta V
(-997) Not deployed
(-998) Unknown if deployed
(-999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 7

- (0) Not equipped/not available
(1) No
(2) Yes
(3) Deployed, unknown if flap(s) opened at designated tear points
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 7

- (0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(3) Deployed, unknown if air bag module cover flap(s) damaged
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

43. Was There Damage To The Air Bag? 97

- (00) Not equipped/not available
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
(03) Cut
(04) Torn
(05) Holed
(06) Burned
(07) Abraded
(88) Other damage (specify): _____

- (95) Damaged, details unknown
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM
EVALUATION *continued*44. Source of Air Bag Damage 9 7

- (00) Not equipped/not available
 (01) Not damaged
 (02) Object worn by occupant, (specify):

(03) Object carried by occupant, (specify):

(04) Adaptive/assistive controls, (specify):

- (05) Fire in vehicle
 (06) Thermal burns
 (07) Rescue or emergency efforts
 (88) Other damage source (specify):

- (95) Damaged, unknown source
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown

45. Was The Air Bag Tethered? 7

- (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of tether straps):

- (3) Deployed, unknown if tethered
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

46. Did The Air Bag Have Vent Ports? 7

- (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of vent ports):

- (3) Deployed, unknown if vent ports present
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 7

- (0) Not equipped/not available
 (1) No
 (2) Yes (specify):
 (3) Deployed, unknown if other occupant contact to air bag
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

48. Was This Occupant Wearing Eye-wear? 7

- (0) Not equipped/not available
 (1) No
 (2) Eyeglasses/sunglasses
 (3) Contact lenses
 (4) Deployed, unknown if eyewear worn
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3

- (0) No head restraints
 (1) Integral—no damage
 (2) Integral—damaged during accident
 (3) Adjustable—no damage
 (4) Adjustable—damaged during accident
 (5) Add-on—no damage
 (6) Add-on—damaged during accident
 (8) Other (specify):

(9) Unknown

50. Seat Type (this Occupant Position) 4 6

- (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Box mounted seat (i.e., van type)
 (10) Other seat type (specify):

(99) Unknown

51. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):

(9) Unknown

52. Seat Track Adjusted Position Prior To Impact 3

- (0) Occupant not seated or no seat
 (1) Non-adjustable seat track

Adjustable Seat Track

- (2) Seat at forward most track position
 (3) Seat between forward most and middle track positions
 (4) Seat at middle track position
 (5) Seat between middle and rear most track positions
 (6) Seat at rear most track position
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 1 4

- (00) Occupant not seated or no seat
 (01) Not adjustable

Upright prior to impact

- (11) Moved to completely rearward position
 (12) Moved to rearward midrange position
 (13) Moved to slightly rearward position
 (14) Retained pre-impact position
 (15) Moved to slightly forward position
 (16) Moved to forward midrange position
 (17) Moved to completely forward position

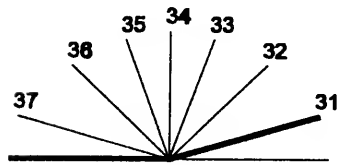
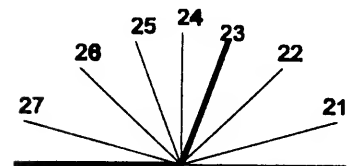
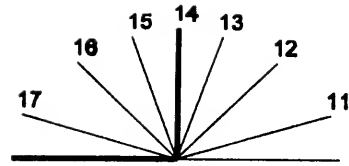
Slightly reclined prior to impact

- (21) Moved to completely rearward position
 (22) Moved to rearward midrange position
 (23) Retained pre-impact position
 (24) Moved to upright position
 (25) Moved to slightly forward position
 (26) Moved to forward midrange position
 (27) Moved to completely forward position

Completely reclined prior to impact

- (31) Retained pre-impact position
 (32) Moved to rearward midrange position
 (33) Moved to slightly rearward position
 (34) Moved to upright position
 (35) Moved to slightly forward position
 (36) Moved to forward midrange position
 (37) Moved to completely forward position

(99) Unknown

54. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat
 (1) No seat performance failure(s)
 (2) Seat adjusters failed
 (3) Seat back folding locks or "seat back" failed
 (specify): _____
 (4) Seat track/anchors failed
 (5) Deformed by impact of occupant
 (6) Deformed by passenger compartment intrusion,
 (specify): _____
 (7) Combination of above (specify): _____
 (8) Other (specify): _____
 (9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model φ φ φ

(000) No child safety seat

Applicable codes are found in your NASS CDS

Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat φ

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation φ φ

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage φ φ59. Child Safety Seat Shield Usage φ φ60. Child Safety Seat Tether Usage φ φ

Note: Options below applicable to Variables OA58-OA60.

(00) No child safety seat

Not Designed With Harness/Shield/Tether

(01) After market harness/shield/tether added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market harness/shield/tether added

(09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES**61. Injury Severity (Police Rating)**1

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment)2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown

64. Hospital Stayφ 3

- (00) Not Hospitalized
- _____ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lostφ 2

- _____ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP WORK HERE**VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

TO BE CODED BY THE ZONE CENTER**INJURY CONSEQUENCES****66. Time to Death**

_____ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
(96) Fatal - ruled disease
(99) Unknown

φ φ**67. 1st Medically Reported Cause of Death**φ φ**68. 2nd Medically Reported Cause of Death**φ φ**69. 3rd Medically Reported Cause of Death**φ φ

_____ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant

_____ Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

φ 3**TRAUMA DATA****71. Glasgow Coma Scale (GCS) Score (at Medical Facility)**

- (00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

φ 2**72. Was the Occupant Given Blood?**

- (1) No - blood not given
(2) Yes - blood given

(specify units):

- (9) Unknown if blood given

1**73. Arterial Blood Gases (ABG) - HCO₃**

- (00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO₃
(96) ABGs reported, HCO₃ unknown
(97) Injured, details unknown
(99) Unknown if injured

φ 1**BELT USE DETERMINATION****74. Primary Source of Belt Use Determination**

- (0) Not equipped/not available/destroyed or rendered inoperative
(1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify):
(9) Unknown if belt used

2



OCCUPANT INJURY FORM

BEST AVAILABLE

Form Approved
O.M.B. No. 2127-002NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number _____

2. Case Number - Stratum DSI-95-AB-053. Vehicle Number 014. Occupant Number 01

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	A.I.S. - 90					Injury Source Confidence Level	Occupant Direct/ Indirect Injury	Area Intrusion Number	ICD-9			
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity							
1st	5. <u>2</u>	6. <u>6</u>	7. <u>4</u>	8. <u>04</u>	9. <u>78</u>	10. <u>1</u>	11. <u>7</u>	12. <u>205</u>	13. <u>2</u>	14. <u>2</u>	15. <u>03</u>	<u>847.1</u>
2nd	16. <u>2</u>	17. <u>6</u>	18. <u>4</u>	19. <u>06</u>	20. <u>78</u>	21. <u>1</u>	22. <u>8</u>	23. <u>205</u>	24. <u>2</u>	25. <u>2</u>	26. <u>03</u>	<u>847.2</u>
3rd	27. <u>2</u>	28. <u>2</u>	29. <u>9</u>	30. <u>02</u>	31. <u>02</u>	32. <u>1</u>	33. <u>7</u>	34. <u>697</u>	35. <u>9</u>	36. <u>7</u>	37. <u>99</u>	<u>910.0</u>
4th	38. _____	39. _____	40. _____	41. _____	42. _____	43. _____	44. _____	45. _____	46. _____	47. _____	48. _____	_____
5th	49. _____	50. _____	51. _____	52. _____	53. _____	54. _____	55. _____	56. _____	57. _____	58. _____	59. _____	_____
6th	60. _____	61. _____	62. _____	63. _____	64. _____	65. _____	66. _____	67. _____	68. _____	69. _____	70. _____	_____
7th	71. _____	72. _____	73. _____	74. _____	75. _____	76. _____	77. _____	78. _____	79. _____	80. _____	81. _____	_____
8th	82. _____	83. _____	84. _____	85. _____	86. _____	87. _____	88. _____	89. _____	90. _____	91. _____	92. _____	_____
9th	93. _____	94. _____	95. _____	96. _____	97. _____	98. _____	99. _____	100. _____	101. _____	102. _____	103. _____	_____
10th	104. _____	105. _____	106. _____	107. _____	108. _____	109. _____	110. _____	111. _____	112. _____	113. _____	114. _____	_____

OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen			(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(7) Superior
(8) Lower Extremity	The exceptions to this rule apply to:		(8) Inferior
(9) Unspecified			(9) Unknown
			(0) Whole region
Type of Anatomic Structure	<u>Whole Area</u>		
(1) Whole Area	(02) Skin - Abrasion		
(2) Vessels	(04) Skin - Contusion		
(3) Nerves	(06) Skin - Laceration		
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion		
(5) Skeletal (includes joints)	(10) Amputation		
(6) Head - LOC	(20) Burn		
(9) Skin	(30) Crush		
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		
		Abbreviated Injury Scale	
		(1) Minor Injury	
		(2) Moderate Injury	
		(3) Serious Injury	
		(4) Severe Injury	
		(5) Critical Injury	
		(6) Maximum (untreatable)	
		(7) Injured, unknown severity	

SOURCE OF INJURY DATA

INJURY SOURCE

DIRECT/INDIRECT INJURY

CONFIDENCE LEVEL

- OFFICIAL RECORDS**
- (1) Autopsy records with or without hospital/medical records
 - (2) Hospital/medical records other than emergency room (e.g., discharge summary)
 - (3) Emergency room records only (including associated X-rays or other lab reports)
 - (4) Private physician, walk-in or emergency clinic
- UNOFFICIAL RECORDS**
- (5) Lay coroner report
 - (6) E.M.S. personnel
 - (7) Interviewee
 - (8) Other source (specify): _____
 - (9) Police

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

INJURY SOURCES

FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): _____
- (019) Other front object (specify): _____

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): _____
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): _____

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): _____
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): _____

INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): _____
- (155) Head restraint system
- (160) Other occupants (specify): _____
- (161) Interior loose objects
- (162) Child safety seat (specify): _____
- (163) Other interior object (specify): _____

AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify) _____
- (195) Other air bag compartment cover (specify) _____

ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): _____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): _____
- (409) Additional or relocated switches, (specify): _____

- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): _____
- (454) Unknown exterior objects

EXTERIOR of OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): _____
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): _____
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): _____
- (514) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (551) Ground
- (598) Other vehicle or object (specify): _____
- (599) Unknown vehicle or object

NONCONTACT INJURY

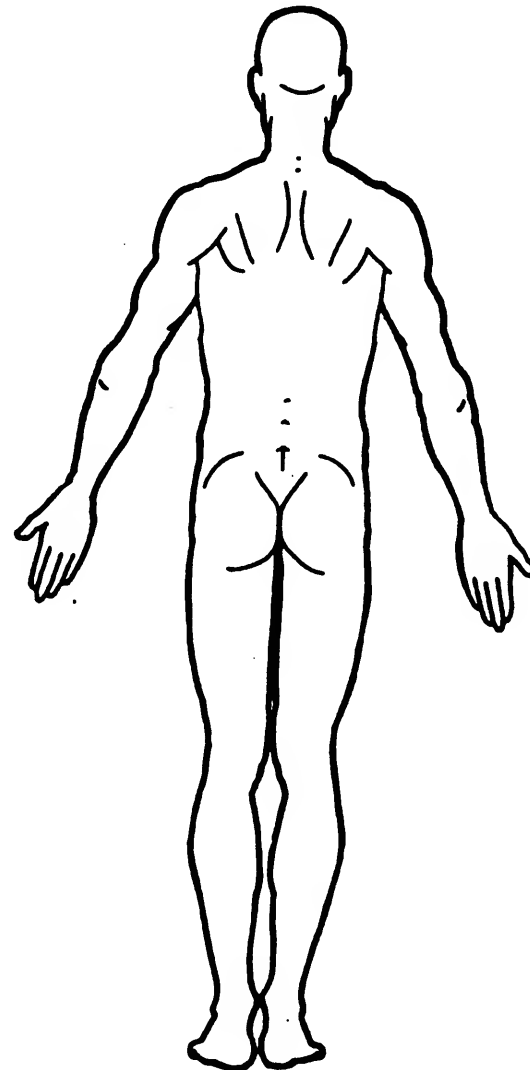
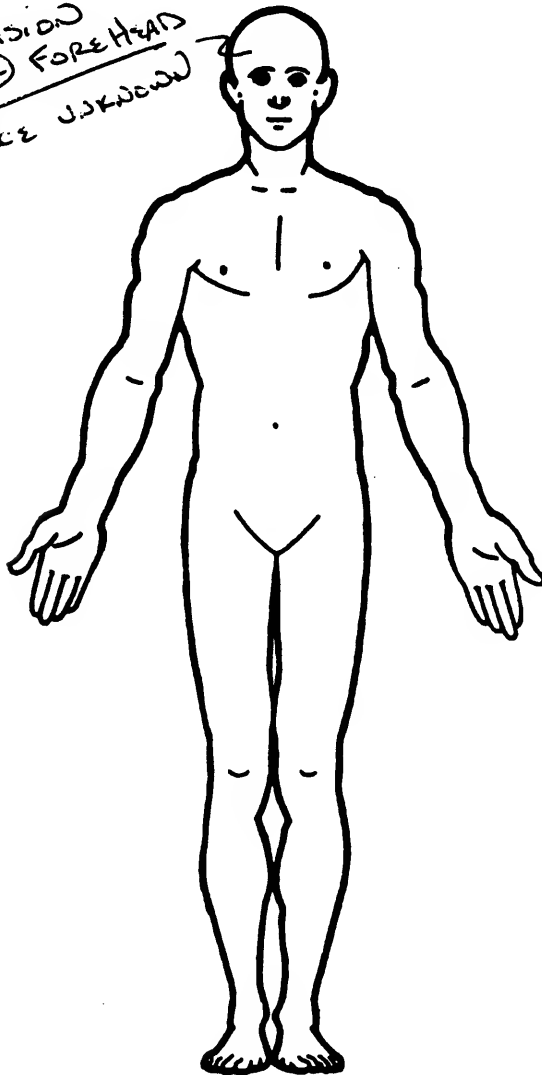
- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): _____
- (604) Air bag exhaust gases
- (697) Injured, unknown source

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

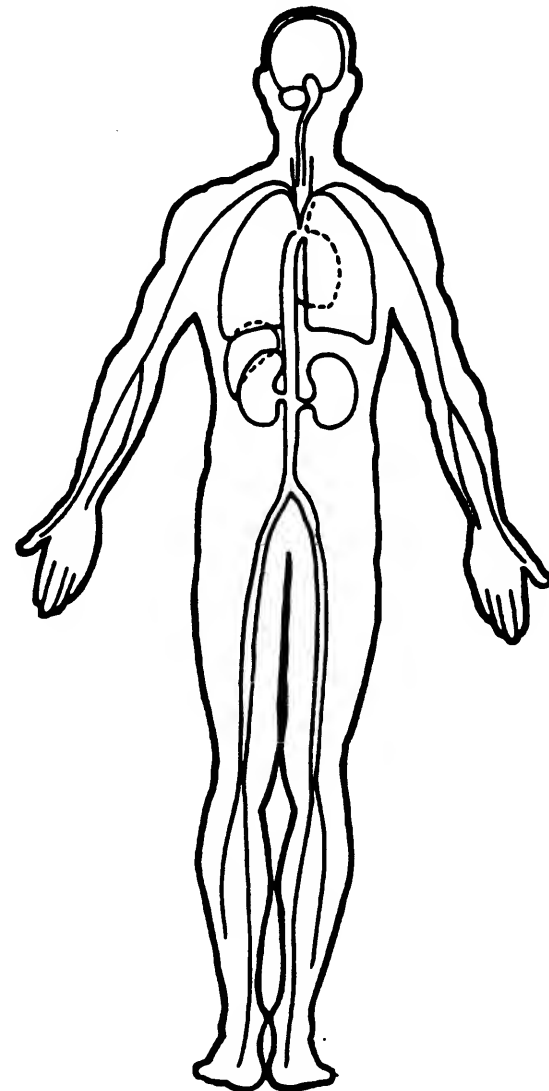
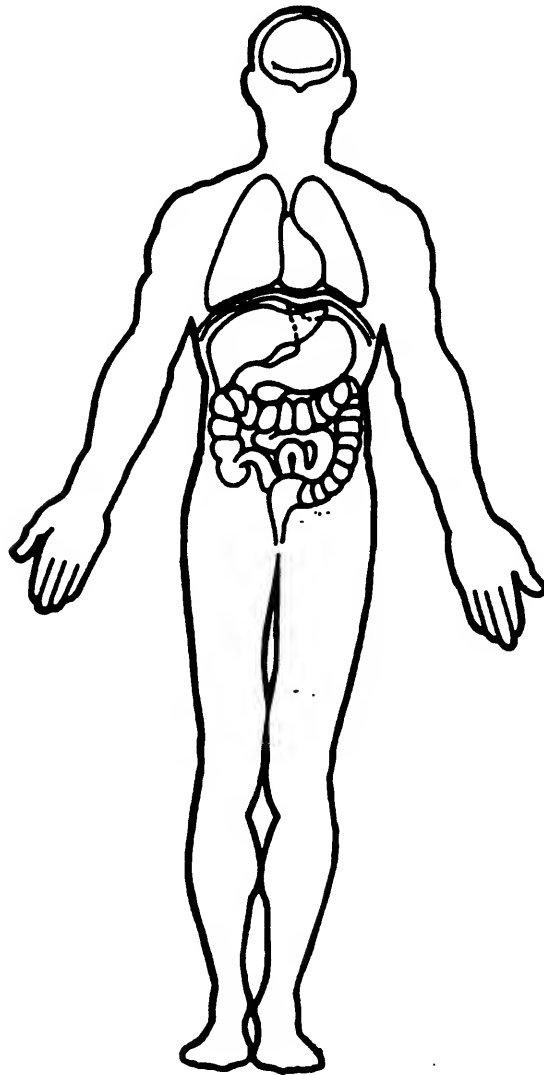
HOSPITAL RECORD

ABRASION
TO (2) FOREHEAD
SOURCE UNKNOWN



OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

☒ No

☐ Yes

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Hospital Records

Blood Alcohol Level (mg/dl)

BAL = .14

Glasgow Coma Scale Score

GCSS =

Units of Blood Given

Units = 0

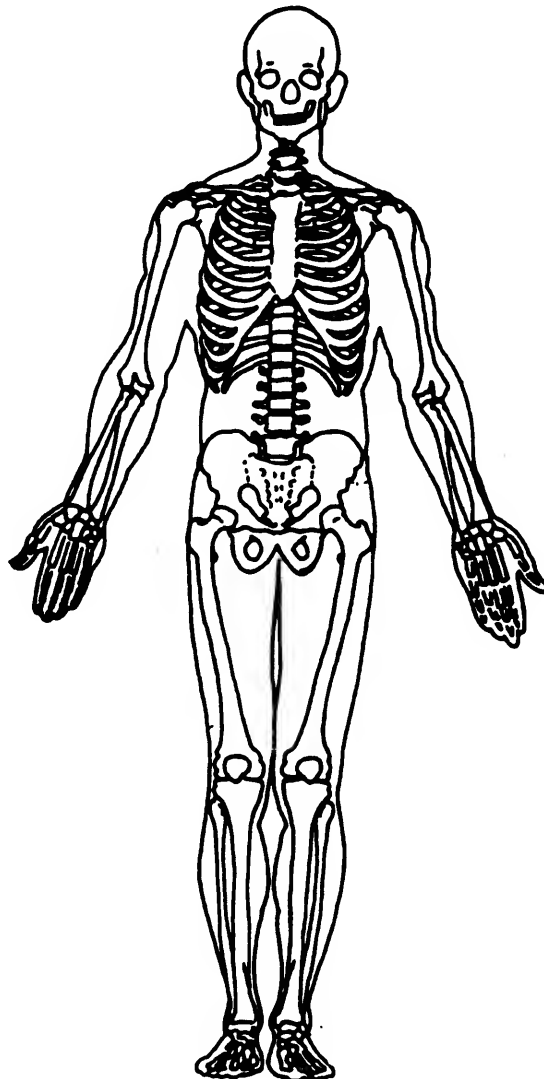
Arterial Blood Gases

pH =

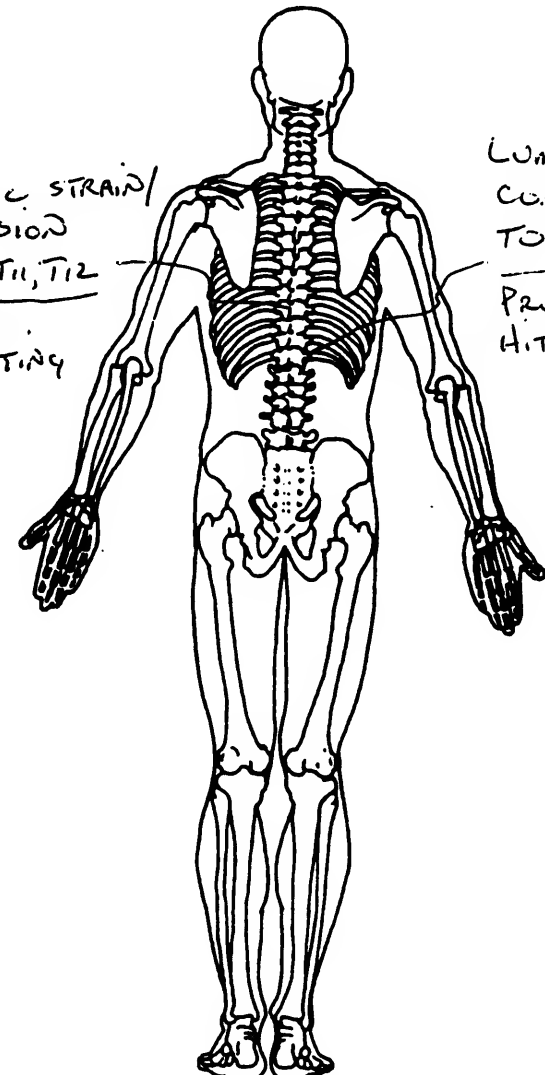
PO₂ =

PCO₂ =

HCO₃ =



THORACIC STRAIN/
COMPRESSION
TO T10, T11, T12
PROBABLY
FROM HITTING
ROOF



LUMBAR STRAIN/
COMPRESSION
TO C.
PROBABLY FROM
HITTING ROOF

National Highway Traffic Safety
AdministrationNATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum DSI-95-AB-45

3. Vehicle Number

4. Occupant Number

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest
centimeter.

(999) Unknown

66 inches X 2.54 = _____ centimeters

8. Occupant's Weight

Code actual weight to the nearest
kilogram.

(999) Unknown

160 pounds X .4536 = _____ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): _____

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): _____

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): _____

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): _____

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): _____

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of
seat

(8) Other abnormal posture (specify): _____

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

φ

13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

φ

14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

φ

15. Medium Status (Immediately Prior To Impact)

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

φ

16. Entrapment

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.
(specify): _____

φ

(9) Unknown

17. Occupant Mobility

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

4

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): _____

(9) Unknown

19. Manual (Active) Belt System Use 4

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify): _____

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

- (6) Broken retractor
- (7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown

22. Shoulder Belt Upper Anchorage Adjustment 1

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 4

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 4

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 4

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 4

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify): _____

- (8) Other improper use of automatic belt system (specify): _____
- (9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 4

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other automatic belt failure (specify): _____

(9) Unknown

POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use

- (0) None used
 (1) Police did not indicate belt use
 (2) Shoulder belt
 (3) Lap belt
 (4) Lap and shoulder belt
 (5) Belt used, type not specified
 (6) Child safety seat
 (7) Automatic belt
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function

- (0) No air bag available
 (1) Police did not indicate air bag availability/function
 (2) Deployed
 (3) Not deployed
 (4) Unknown if deployed
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☐ Not equipped/not available/destroyed or rendered inoperative
☒ Vehicle inspection
☐ Official injury data
☐ Driver/occupant interview
☐ Other (specify):

☐ Unknown if belt used

AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System

Availability/Function
 (This Occupant Position)

- (0) Not equipped/not available
 (1) Air bag

Non-functional

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
 (9) Unknown

31. Frontal Air Bag System Deployment
(This Occupant Position)

- (0) Not equipped/not available
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

32. Other Than First Seat Frontal Air Bag
Availability/Function

(This Occupant Position)

- (0) Not equipped/not available
 (1) Air bag

Non-functional

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
 (9) Unknown

Specify type of "other" air bag present:

33. Air Bag(s) Deployment, Other Than First
Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

34. Are There Indications of Air Bag System
Failure?

(This Occupant Position)

- (0) Not equipped/not available
 (1) No
 (2) Yes (specify):

(9) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

- (0) Not equipped/not available
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)
(3) One previous accident with deployment
(4) More than one previous accident with at least one deployment
(8) Previous accidents, unknown deployment status
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available
(1) Original manufacturer installed system
(2) Retrofitted air bag
(3) Replacement air bag
(8) Unknown type of air bag
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1

- (0) Not equipped/not available
(1) No prior maintenance
(2) Yes, prior maintenance (specify): _____

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 97

- (00) Not equipped/not available
_____ Code the accident event sequence number that initiated the air bag deployment
(96) Deployed, unknown event
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

39. CDC For Air Bag Deployment Impact 7

- (0) Not equipped/not available
(1) Highest delta V
(2) Second highest delta V
(3) Other non-coded delta V (specify): _____

- (6) Deployed, unknown event
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 997

(-000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

- (-996) Deployment, unknown longitudinal Delta V
(-997) Not deployed
(-998) Unknown if deployed
(-999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 7

- (0) Not equipped/not available
(1) No
(2) Yes
(3) Deployed, unknown if flap(s) opened at designated tear points
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 7

- (0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(3) Deployed, unknown if air bag module cover flap(s) damaged
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

43. Was There Damage To The Air Bag? 97

- (00) Not equipped/not available
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
(03) Cut
(04) Torn
(05) Holed
(06) Burned
(07) Abraded
(88) Other damage (specify): _____

- (95) Damaged, details unknown
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM
EVALUATION *continued*

44. Source of Air Bag Damage 9 7
 (00) Not equipped/not available
 (01) Not damaged
 (02) Object worn by occupant, (specify):

 (03) Object carried by occupant, (specify):

 (04) Adaptive/assistive controls, (specify):

 (05) Fire in vehicle
 (06) Thermal burns
 (07) Rescue or emergency efforts
 (08) Other damage source (specify):

 (95) Damaged, unknown source
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown
45. Was The Air Bag Tethered? 7
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of tether straps):

 (3) Deployed, unknown if tethered
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 7
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of vent ports):

 (3) Deployed, unknown if vent ports present
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 7
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):

 (3) Deployed, unknown if other occupant contact to air bag
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 7
 (0) Not equipped/not available
 (1) No
 (2) Eyeglasses/sunglasses
 (3) Contact lenses
 (4) Deployed, unknown if eyewear worn
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3
 (0) No head restraints
 (1) Integral—no damage
 (2) Integral—damaged during accident
 (3) Adjustable—no damage
 (4) Adjustable—damaged during accident
 (5) Add-on—no damage
 (6) Add-on—damaged during accident
 (8) Other (specify):

 (9) Unknown
50. Seat Type (this Occupant Position) 6 6
 (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Box mounted seat (i.e., van type)
 (10) Other seat type (specify):

 (99) Unknown
51. Seat Orientation (this Occupant Position) 1
 (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):

 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 5
 (0) Occupant not seated or no seat
 (1) Non-adjustable seat track
- Adjustable Seat Track*
 (2) Seat at forward most track position
 (3) Seat between forward most and middle track positions
 (4) Seat at middle track position
 (5) Seat between middle and rear most track positions
 (6) Seat at rear most track position
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 1 4

- (00) Occupant not seated or no seat
 (01) Not adjustable

Upright prior to impact

- (11) Moved to completely rearward position
 (12) Moved to rearward midrange position
 (13) Moved to slightly rearward position
 (14) Retained pre-impact position
 (15) Moved to slightly forward position
 (16) Moved to forward midrange position
 (17) Moved to completely forward position

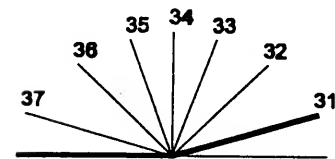
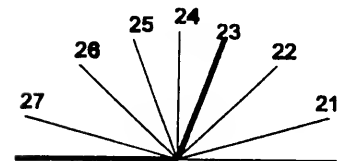
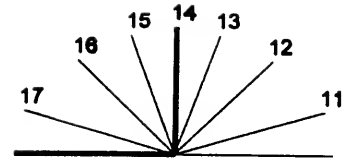
Slightly reclined prior to impact

- (21) Moved to completely rearward position
 (22) Moved to rearward midrange position
 (23) Retained pre-impact position
 (24) Moved to upright position
 (25) Moved to slightly forward position
 (26) Moved to forward midrange position
 (27) Moved to completely forward position

Completely reclined prior to impact

- (31) Retained pre-impact position
 (32) Moved to rearward midrange position
 (33) Moved to slightly rearward position
 (34) Moved to upright position
 (35) Moved to slightly forward position
 (36) Moved to forward midrange position
 (37) Moved to completely forward position

(99) Unknown

54. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat
 (1) No seat performance failure(s)
 (2) Seat adjusters failed
 (3) Seat back folding locks or "seat back" failed
 (specify): _____
 (4) Seat track/anchors failed
 (5) Deformed by impact of occupant
 (6) Deformed by passenger compartment intrusion,
 (specify): _____
 (7) Combination of above (specify): _____
 (8) Other (specify): _____
 (9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model

(000) No child safety seat

Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage

59. Child Safety Seat Shield Usage

60. Child Safety Seat Tether Usage

Note: Options below applicable to
Variables OA58-OA60.

(00) No child safety seat

Not Designed With Harness/Shield/Tether(01) After market harness/shield/tether
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market
harness/shield/tether added(09) Unknown if harness/shield/tether
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES**61. Injury Severity (Police Rating)** ϕ

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality ϕ

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) ϕ

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

- (9) Unknown

64. Hospital Stay ϕ ϕ

- (00) Not Hospitalized
_____ Code the number of days (up through 60)
that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost ϕ ϕ

- _____ Code the number of days
(up through 60) that the occupant
lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP WORK HERE**VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

TO BE CODED BY THE ZONE CENTER**INJURY CONSEQUENCES****TRAUMA DATA****66. Time to Death**

_____ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
(96) Fatal - ruled disease
(99) Unknown

0 0

67. 1st Medically Reported Cause of Death

0 0

68. 2nd Medically Reported Cause of Death

0 0

69. 3rd Medically Reported Cause of Death

_____ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
(96) Mode of death given but specific injuries are not linked to cause of death. (specify): _____

- (97) Other result (includes fatal ruled disease) (specify): _____

- (99) Unknown

0 0

70. Number of Recorded Injuries for This Occupant

_____ Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

0 1

71. Glasgow Coma Scale (GCS) Score (at Medical Facility)

- (00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

0 1

72. Was the Occupant Given Blood?

- (1) No - blood not given
(2) Yes - blood given
(specify units): _____
(9) Unknown if blood given

1

73. Arterial Blood Gases (ABG) - HCO₃

- (00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO₃
(96) ABGs reported, HCO₃ unknown
(97) Injured, details unknown
(99) Unknown if injured

0 1

BELT USE DETERMINATION**74. Primary Source of Belt Use Determination**

- (0) Not equipped/not available/destroyed or rendered inoperative
(1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify): _____
(9) Unknown if belt used

1



OCCUPANT INJURY FORM

1. Primary Sampling Unit Number _____

3. Vehicle Number φ 12. Case Number - Stratum DSI-95-AB-φ54. Occupant Number φ 2

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	A.I.S. - 90					Injury Source Confidence Level	Occupant Direct/ Indirect Injury	Area Intrusion Number	ICD-9			
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity							
1st	5. <u>7</u>	6. <u>8</u>	7. <u>9</u>	8. <u>φ 4</u>	9. <u>φ 2</u>	10. <u>1</u>	11. <u>1</u>	12. <u>φ 1 2</u>	13. <u>3</u>	14. <u>1</u>	15. <u>φ φ</u>	924.1
2nd	16. _____	17. _____	18. _____	19. _____	20. _____	21. _____	22. _____	23. _____	24. _____	25. _____	26. _____	_____
3rd	27. _____	28. _____	29. _____	30. _____	31. _____	32. _____	33. _____	34. _____	35. _____	36. _____	37. _____	_____
4th	38. _____	39. _____	40. _____	41. _____	42. _____	43. _____	44. _____	45. _____	46. _____	47. _____	48. _____	_____
5th	49. _____	50. _____	51. _____	52. _____	53. _____	54. _____	55. _____	56. _____	57. _____	58. _____	59. _____	_____
6th	60. _____	61. _____	62. _____	63. _____	64. _____	65. _____	66. _____	67. _____	68. _____	69. _____	70. _____	_____
7th	71. _____	72. _____	73. _____	74. _____	75. _____	76. _____	77. _____	78. _____	79. _____	80. _____	81. _____	_____
8th	82. _____	83. _____	84. _____	85. _____	86. _____	87. _____	88. _____	89. _____	90. _____	91. _____	92. _____	_____
9th	93. _____	94. _____	95. _____	96. _____	97. _____	98. _____	99. _____	100. _____	101. _____	102. _____	103. _____	_____
10th	104. _____	105. _____	106. _____	107. _____	108. _____	109. _____	110. _____	111. _____	112. _____	113. _____	114. _____	_____

OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive	(1) Right
(2) Face		two-digit numbers beginning with 02.	(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen		To the extent possible, within the organizational	(5) Anterior
(6) Spine		framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one	(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity	The exceptions to this rule apply to:		(8) Inferior
(9) Unspecified			(9) Unknown
			(0) Whole region
Type of Anatomic Structure	<u>Whole Area</u>		
(1) Whole Area	(02) Skin - Abrasion		
(2) Vessels	(04) Skin - Contusion		
(3) Nerves	(06) Skin - Laceration		
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion		
(5) Skeletal (includes joints)	(10) Amputation		
(6) Head - LOC	(20) Burn		
(9) Skin	(30) Crush		
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		

Abbreviated Injury Scale

(1) Minor Injury
(2) Moderate Injury
(3) Serious Injury
(4) Severe Injury
(5) Critical Injury
(6) Maximum (untreatable)
(7) Injured, unknown severity

SOURCE OF INJURY DATA

INJURY SOURCE

DIRECT/INDIRECT INJURY

CONFIDENCE LEVEL

OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

INJURY SOURCES

FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): _____
- (019) Other front object (specify): _____

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): _____
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): _____

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): _____

- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.

- (110) Other right side object (specify): _____

INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): _____

- (155) Head restraint system
- (160) Other occupants (specify): _____

- (161) Interior loose objects
- (162) Child safety seat (specify): _____

- (163) Other interior object (specify): _____

AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held

- (184) Air bag-passenger side and object in mouth

- (185) Air bag compartment cover-passenger side

- (186) Air bag compartment cover-passenger side and eyewear

- (187) Air bag compartment cover-passenger side and jewelry

- (188) Air bag compartment cover-passenger side and object held

- (189) Air bag compartment cover-passenger side and object in mouth

- (190) Other air bag (specify) _____

- (195) Other air bag compartment cover (specify) _____

ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): _____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): _____
- (409) Additional or relocated switches, (specify): _____

- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)

- (412) Other adaptive device (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): _____

- (454) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): _____

- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): _____

- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): _____

- (514) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (551) Ground
- (598) Other vehicle or object (specify): _____

- (599) Unknown vehicle or object

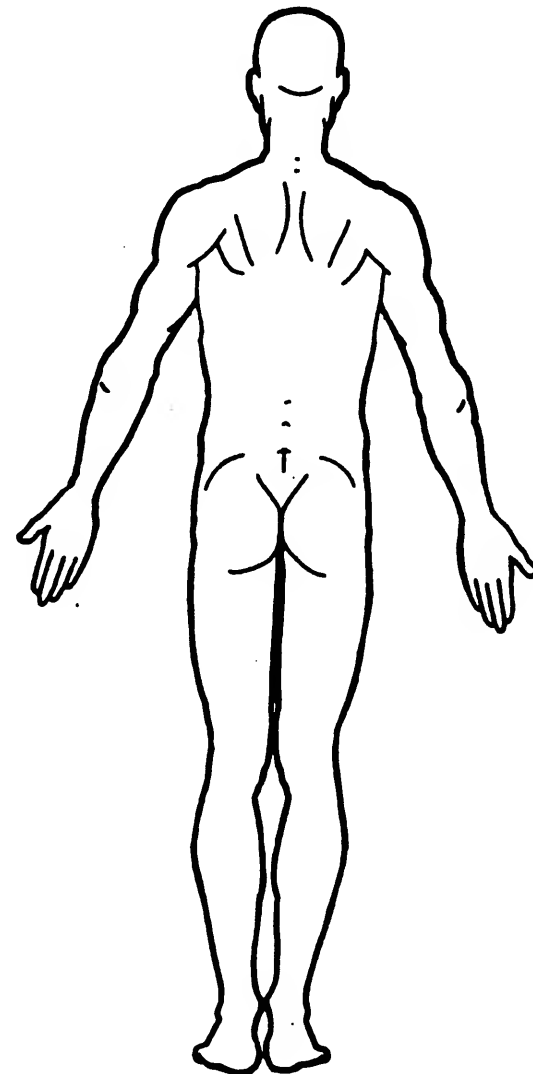
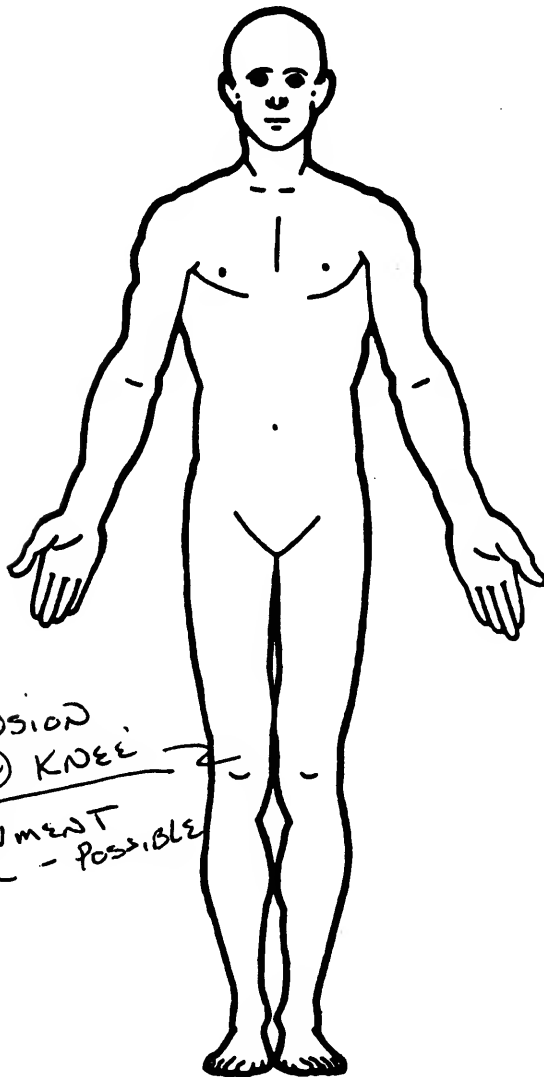
NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): _____
- (604) Air bag exhaust gases
- (697) Injured, unknown source

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

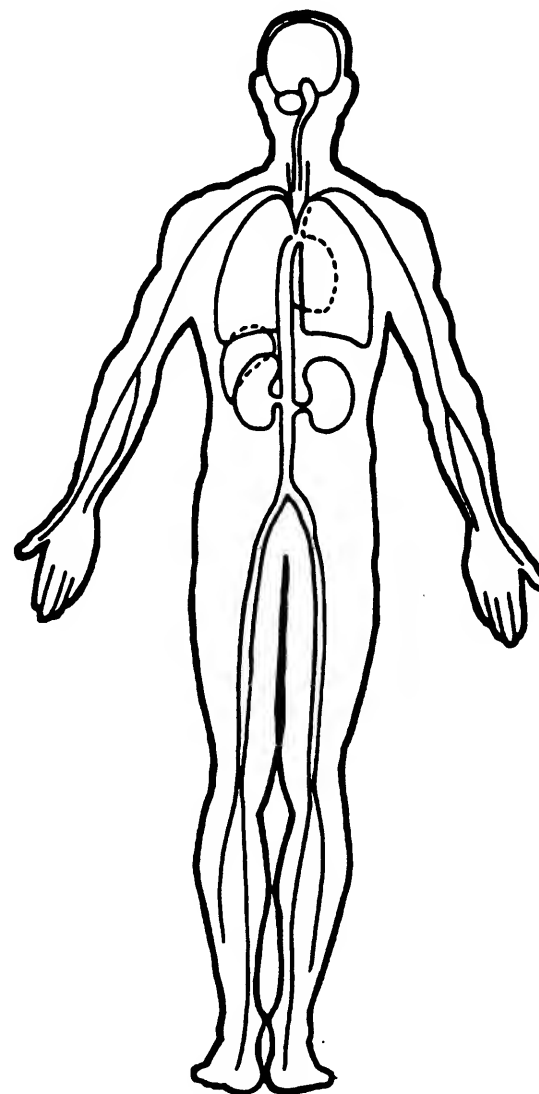
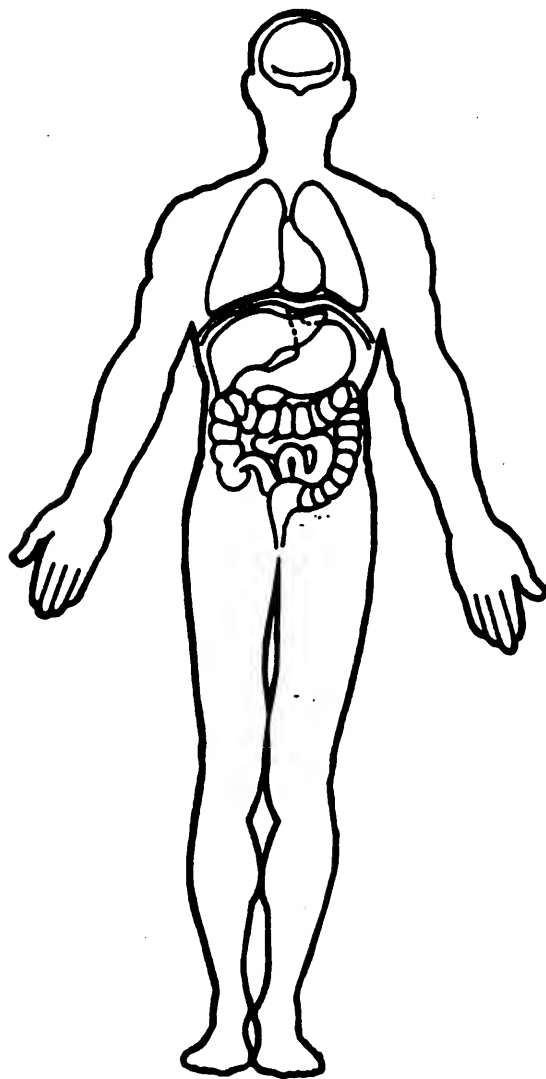
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

DATA FROM DRIVER



OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

___ No

___ Yes

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Blood Alcohol Level
(mg/dl)

BAL = ____

Glasgow Coma
Scale Score

GCSS = ____

Units of Blood
Given

Units = ____

Arterial Blood Gases

pH = ____

PO₂ = ____

PCO₂ ____

HCO₃ ____

